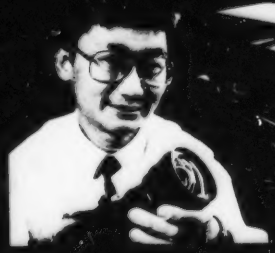
1999/2000

Annual Report & Financial Review



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of British Columbia

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Science Council of British Columbia
Turning Ideas Into Solutions

1999/2000 Annual Report & Financial Review

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VIEW FROM THE CHAIR

The Science Council can play an important role in public awareness and facilitate discussion on the issues.

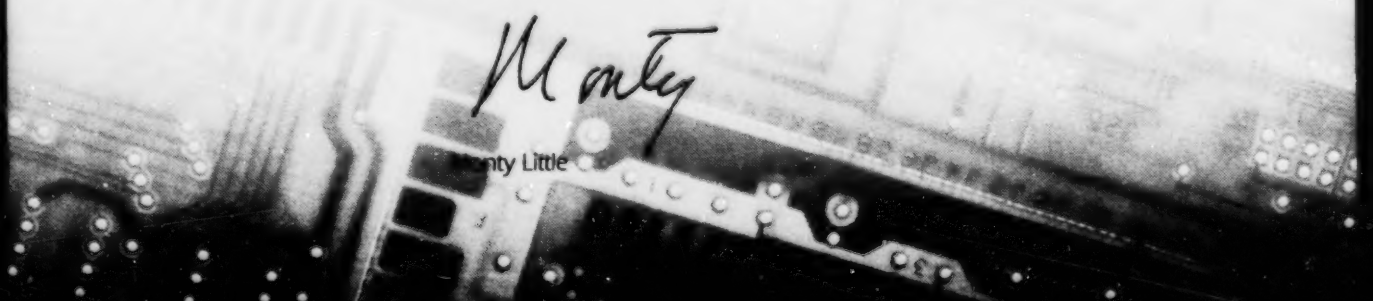
When then-Technology Minister Andrew Petter announced my appointment as Science Council Chair at the 1999 Awards Dinner, I felt a strong sense of honour and obligation. I follow several distinguished predecessors including, most recently, Dr. Martha Salcudean and Dr. Suezone Chow. Both did much to ensure that the Council kept its strategic goals in clear focus. Their records are impressive. Of course I want to maintain the momentum they achieved. Yet, because **every year brings new challenges and opportunities,** the issues the current Board must deal with will be different. And in the realm of science and technology, these can be daunting.

Many technologies are evolving so quickly, in fact, that no one fully understands their implications. For example, think of the impact that telecommunications, computers and robotics have had on BC's resource-based industries, particularly with respect to adding value to raw materials. And look at the huge shakeup that's occurring in publishing, retailing, entertainment and business-to-business commerce thanks to the Internet. Or consider the potential effects of genome science on medicine, the insurance industry and agriculture. A lack of public understanding of these developments and their consequences has led to confusion and mistrust.

The Science Council is uniquely positioned to reduce that confusion and turn mistrust into trust. **One characteristic that distinguishes us from other provincial science and technology organizations is our extensive, province-wide volunteer network.** It includes hundreds of BC's top scientists, engineers, technologists, entrepreneurs, business people, educators and communicators, who are not only familiar with the leading edge of their fields, but, in many instances, are working there. What a resource they are! What remarkable credibility they give the Science Council!

The Science Council can play an important role in public awareness. We can facilitate discussions of the issues – for example, the social implications of science and technology – that is, how they affect us in our daily lives. And we can work with other organizations and agencies to help **ensure that the public gets accurate information on science and technology topics.** This will help individuals, communities and other interested parties make appropriate decisions based on facts.

This is our challenge and our opportunity.



Monty Little

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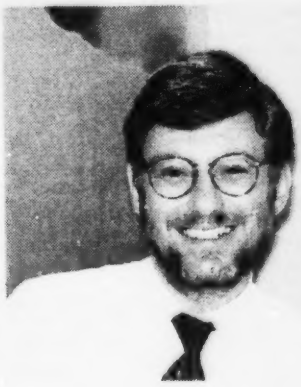
President's Perspective



The past year has been one of change, adjustment, and development at the Science Council, positioning the Council to move forward with renewed enthusiasm, focus, and energy. Our efforts were made much easier last fall when the government filled all eight vacancies on the Council's Board and appointed Mr. Monty Little as our new Chair. **Our newly invigorated Board includes strong representation from the academic and business communities,** increased links to other BC S&T organizations, and unprecedented levels of regional representation.

A highlight in 1999 was the introduction of the government's BC High-Tech Strategy - "A Strategy for Growth". The Council is directing significant energies into existing and new activities in support of the strategy. We deliver the provincially-funded Technology BC Program and the Graduate Research in Engineering and Technology (GREAT) Program, which support important R&D and talent development elements of the strategy. In partnership with the province's Information Science and Technology Agency (ISTA), we are also focusing on performance measurement, benchmarking, and assessment to determine how well BC is doing overall in meeting the goals set out in the strategy.

Our efforts continued in 1999 to seek new opportunities and partnerships and to improve our programs. **We successfully developed new program opportunities,** such as the Fisheries Renewal BC Research Program. We undertook special studies, initiatives, and events in collaboration with others sharing our interests in advancing BC's S&T based economic development. This included activities involving S&T in the resource sectors and international opportunities. Important program reviews were completed during 1999/2000. **Steps were identified to make our programs even more effective.** The Technology BC program was reviewed in partnership with ISTA (on whose behalf we administer the program). Many leading BC technology-based firms credit Technology BC with providing them R&D funding at a crucial time in their histories. The evidence is that BC achieves significant returns on the provincial investment in R&D through Technology BC. We want to ensure that Technology BC is an effective, viable source of early-stage funding for the start-ups of tomorrow.

During 1999/2000, the availability of resources to enable the Council's work continued as a challenge. This challenge remains for 2000/2001, as Council fully applies its remaining reserves. The Council, and the clients and public we serve, are fortunate that **the value of our programs and the skills of our volunteers and staff continue to be recognized as an effective way to achieve technology-based growth in BC.** The benefit to BC over more than 20 years of Council operations is clear. The wisdom of government in making these important public S&T investments is laudable. In conclusion, I would like to acknowledge the dedication and contributions of our current and past Board members, our staff, and the hundreds of Science Council volunteers contributing to this success. I'd especially like to thank our immediate past Chair, Dr. Martha Salcudean, for her outstanding and tireless effort on behalf of the Science Council.

Jim Reichert

Jim Reichert, Ph.D., P.Eng

Science Council of BC Board Members

(includes all who served between April 1, 1999 and March 31, 2000)

DR. HILDA CHING*
Principal
Hydra Enterprises Ltd.
Vancouver **Sept. 1999*

MS. GILLIAN GERHARD
Lecturer, Integrated and Coordinated Science Programs
University of British Columbia
Vancouver

MS. JANE GROVES
Director, Technology Transfer Office
Malaspina University College
Nanaimo **Sept. 1999*

DR. DEBORAH HENDERSON
President
ES Cropconsult Ltd.
Vancouver *Member to Aug. 1999*

MR. BARRY JINKS
President & CEO
SynchroPoint Wireless Inc.
Vancouver

MS. VICKIE LESSOWAY
Manager, Education Programs and Clinical Marketing
ALI Technologies Ltd.
Richmond *Member to Aug. 1999*

DR. MICHAEL LEVY
Vice President, Research and Development
NewHeights Software Corp.
Victoria **Sept. 1999*

MR. MONTY LITTLE (Chair)
President
Syndel Laboratories Ltd.
Vancouver **Chair from Sept. 1999*

MS. DAWN MILLER
Executive Director
Innovation Resource Centre
Prince George **Sept. 1999*

MR. PHIL NORTHCOTT
Leader, Product Development
PMC-Sierra Inc.
Burnaby

DR. DEBORAH POFF
Vice-President Academic
University of Northern BC
Prince George

DR. JIM REICHERT
President
Science Council of BC
Burnaby

DR. DON RIX
Chairman
MDS Metro Laboratories
Burnaby **Sept. 1999*

DR. NEIL RUSSELL
Vice President, Instruction
University College of the Cariboo
Kamloops

DR. MARTHA SALCUDEAN (Past Chair)
Professor, Mechanical Engineering
University of British Columbia,
Vancouver *Chair to Aug. 1999*

MR. BRENT SAUDER
Executive Director
BC Advanced Systems Institute
Vancouver **Sept. 1999*

MR. LARRY SMITH
Chair, Science Council of BC - Okanagan
Kelowna *Member to July 1999*

MS. CINDY STEWART
President
Health Science Association of BC
Vancouver **Sept. 1999*

DR. NORMAN STREAT
Director, Technology Centre
BC Institute of Technology
Burnaby

MS. CLAUDIA TRUDEAU
Executive Director
Kootenay Association for Science and Technology
Rossland **Sept. 1999*

** Member from*

STAFF OF THE SCIENCE COUNCIL OF BC

(includes all staff employed on March 31, 2000)

Presidential and Council Affairs

JIM REICHERT
President & CEO

MAX CAIRNS
Vice President

CLAIRE BILBROUGH
International Science and Technology Coordinator

ALISON HENRIQUES
Receptionist

CINDY LUM
Office Manager, Council Coordinator

KAREN MAY
Administrative Assistant

LINDA QUAN
Administrative Assistant

Planning and Analysis

USCHI KOEBBERLING
Director, Planning and Analysis

VENERANDA DETTMERS
Research Analyst

PENNY LIMER
Human Resources Development Projects Coordinator

Communications and Marketing

LEE OWEN
Manager, Communications and Marketing

DEBBIE JAY
Communications Assistant

KATHRYN JONES
Communications Officer - Publications

MARILYN PIERLET
Communications Officer - Events

NOVAK ROGIC
Webmaster

Finance and Administration

GARY KUNO
Director, Finance and Administration

SHELLEY NEUFELD
Financial Assistant *(on leave)*

SHAHIN SHIVJI
Financial Assistant

MICHAEL SMITH
Information Systems Analyst

CATHY TWEEDDALE
Financial Assistant

Programs

RICK WARNER
Director of Programs

DARRYL ATKINSON
Programs Coordinator

KEVIN CARVILL
Programs Coordinator

TERRI CHANYUNGCO
Programs Manager, Forest Renewal BC

VICTORIA DAVEY
Programs Assistant

BERNADETTE MAH
Programs Coordinator

JOHN MATECHUK
Programs Coordinator

JULIE NG
Programs Assistant

LISA RERUP *(on leave)*
Programs Coordinator

TINA RASMUSSEN
Programs Assistant

JULIE SHARPE
Programs Assistant

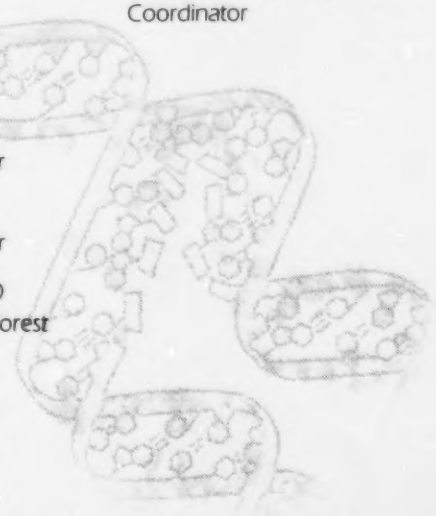
NANA ZOLBROD
Programs Coordinator

Regional Initiatives

GAIL BROWN
Director, Regional Initiatives

LAUREL DOUGLAS
Okanagan Regional Project Coordinator

SUE ROBINSON
Peace Laird Regional Project Coordinator



THE YEAR IN REVIEW

April 1, 1999 to March 31, 2000

The 1999 BC Science & Technology Awards Dinner was our most successful event ever.

Of the 366 days in our 1999-2000 fiscal year, two days stand out – Monday, October 18, 1999 and Tuesday, February 29, 2000. October 18 was the day of our BC Science & Technology Awards Dinner, when more than 800 people joined in applauding the achievements of our 1999 Award Winners. It was our most successful Awards Dinner ever. The significance of the evening was increased even more when Advanced Education, Training and Technology Minister Andrew Petter announced the appointment of eight new Science Council Board members and named Monty Little as our new Chair.

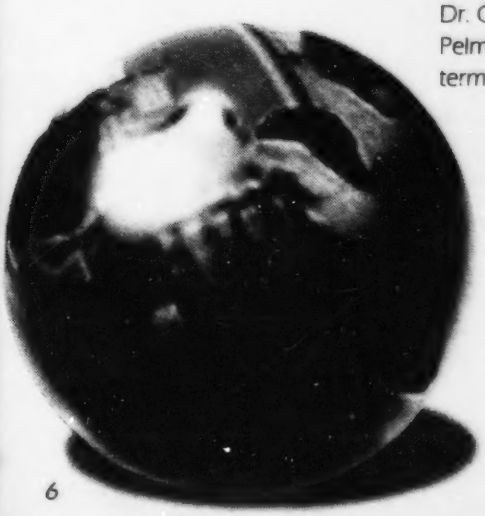
On leap day, February 29, 2000, the government of Premier Ujjal Dosanjh appointed a new Minister of Advanced Education, Training and Technology, Graeme Bowbrick, MLA for New Westminster.

Looking back on the year that ended this past March 31, we at the Science Council feel increased optimism about the future success of science and technology in BC.

Transitions

Not since the provincial government established the Science Council in 1978 have so many new members been appointed to the Board at once. Shortly before the 1999 BC Science & Technology Awards Dinner in October, the government filled eight vacancies on the 15-member Board with the following new appointments: Dr. Hilda Ching, Ms. Jane Groves, Dr. Michael Levy, Ms. Dawn Miller, Dr. Don Rix, Mr. Brent Sauder, Ms. Cindy Stewart, and Ms. Claudia Trudeau. At the same time, Mr. Monty Little, a Board member since March 1996, was named Chair. Mr. Little is President of Syndel Laboratories of Vancouver.

In welcoming our new Chair and Board members, we also wish to thank Dr. Gail Bellward, Dr. Deborah Henderson, Ms. Vickie Lessoway, Dr. Alan Pelman, Dr. Martha Salcudean (past Chair) and Mr. Larry Smith, whose terms on the Board ended.



Technology BC

"With success stories like PMC-Sierra, CREO and MacDonald Dettwiler, **BC is making a cutting-edge contribution to the global technological revolution.**" So said Finance Minister Paul Ramsey in his March Budget address to the Legislature. He might have added that those three BC companies, along with hundreds of others, received support at a crucial time in their early development from the Technology BC program, administered by the Science Council on behalf of the Information, Science and Technology Agency (ISTA).

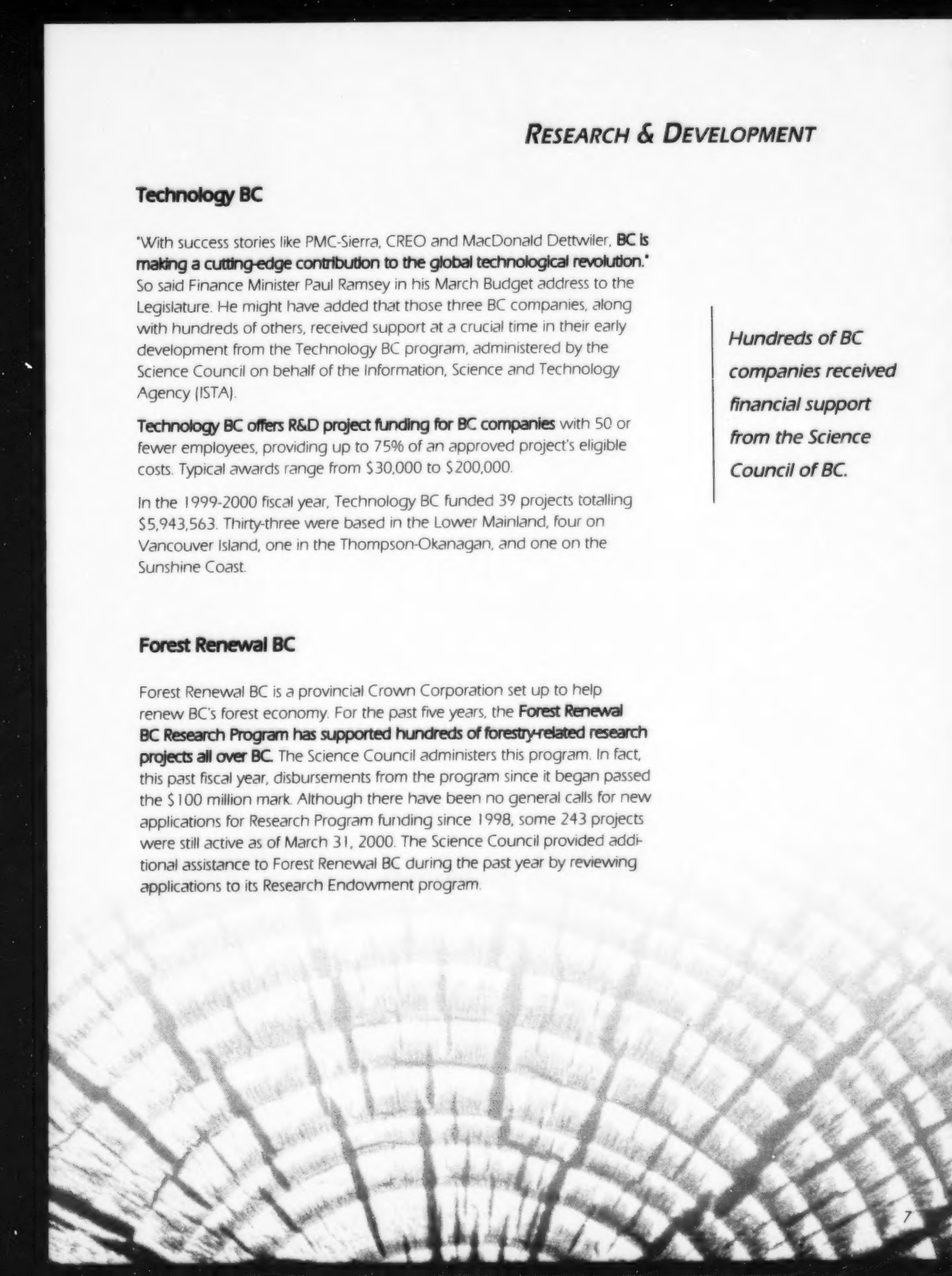
Hundreds of BC companies received financial support from the Science Council of BC.

Technology BC offers R&D project funding for BC companies with 50 or fewer employees, providing up to 75% of an approved project's eligible costs. Typical awards range from $30,000 to $200,000.

In the 1999-2000 fiscal year, Technology BC funded 39 projects totalling $5,943,563. Thirty-three were based in the Lower Mainland, four on Vancouver Island, one in the Thompson-Okanagan, and one on the Sunshine Coast.

Forest Renewal BC

Forest Renewal BC is a provincial Crown Corporation set up to help renew BC's forest economy. For the past five years, the **Forest Renewal BC Research Program has supported hundreds of forestry-related research projects all over BC.** The Science Council administers this program. In fact, this past fiscal year, disbursements from the program since it began passed the $100 million mark. Although there have been no general calls for new applications for Research Program funding since 1998, some 243 projects were still active as of March 31, 2000. The Science Council provided additional assistance to Forest Renewal BC during the past year by reviewing applications to its Research Endowment program.



Research & Development

Fisheries Renewal BC

Fisheries Renewal BC is a new provincial crown corporation established to help renew BC's fisheries. **It invests in programs aimed at improving fish stocks and habitat,** developing new fisheries, creating jobs, diversifying and marketing products and services, and strengthening communities that depend on aquatic resources. The corporation launched a pilot research program in 1999 and contracted the Science Council to administer it.

Fourteen projects, worth a total of $281,934, received assistance in the pilot program. Examples include the Bonaparte River Fishway Coho enumeration project being undertaken by the Bonaparte Indian Band in Cache Creek, and a University of Northern BC project to determine effective population size for four stocks of upper Fraser River Chinook salmon. Other communities hosting projects are Bella Bella, Chilliwack, Enderby, Kitkatla, Prince George, Prince Rupert, Qualicum Beach, Savona, Sidney and Ucluelet.

Science and Technology Infrastructure Program

Over the past year, STIP awarded a total of $541,773 to support 27 project applications.

The Science Council and the BC Discovery Foundation created the Science and Technology Infrastructure Program (STIP) to **help applicants put together well-documented and convincing proposals for federal government support.** Awards of up to $20,000 per project can also be used to prepare applications to such organizations as the Canada Foundation for Innovation (CFI), the Natural Sciences and Engineering Research Council (NSERC), the Networks of Centres of Excellence (NCE) and the Medical Research Council (MRC). The requests must be for at least $250,000 in federal funding. Over the past year, STIP awarded a total of $541,773 to support 27 project applications. These totals included two awards made under the matching funds component of the program that is no longer offered.

Meanwhile, the BC Ministry of Advanced Education, Training and Technology manages the Knowledge Development Fund (KDF), which is similar in its objectives to the federal CFI program. The Science Council has been helping the Ministry review applications to the KDF.

In addition to the Human Resources Development projects and initiatives listed under Planning and Analysis, we have continued to deliver the Human Resources Development activities we've had in place for several years – our scholarships, Student Summer Works and student recognition programs.

GREAT Scholarships

The Science Council's GREAT (Graduate Research, Engineering And Technology) Scholarships provide up to $20,000 per student annually. To qualify, students must do their graduate thesis research in cooperation with a BC company. While the **students gain valuable experience working on challenges that technology-based companies face in the "real world,"** companies benefit from the students' fresh insights, knowledge and enthusiasm. In 1999-2000, the Council allocated $1,500,000 to the GREAT program. Scholarships went to 14 students at Simon Fraser University, 53 at the University of British Columbia, seven at the University of Northern BC and five at the University of Victoria.

IBM Scholarships

The Science Council also administers the IBM Canada Ltd./Pacific Development Centre (PDC) Scholarships. These are **aimed at high school students planning to enter a full-time post-secondary program.** As part of a five-year agreement between IBM Canada Ltd. and the provincial government to encourage growth in BC's information technology sector, IBM provides funding for 10 new PDC scholarships annually, worth $10,000 each.

Student Summer Works

The Science Council was one of 12 host agencies for the Ministry of Advanced Education, Training and Technology's Student Summer Works program. **This program reimburses employers who create summer jobs for students.** The program supported jobs for 261 secondary and post-secondary students with employers in Belcarra, Coquitlam, Maple Ridge, Pitt Meadows, Port Coquitlam and Port Moody.

PLANNING AND ANALYSIS

The Science Council Act requires the Council to "advise the government on implementation of science policy" and to "gather and organize information on scientific research." Accordingly, the Science Council is researching, reviewing, analyzing and advising on matters that are pertinent to those mandated requirements. Here are some examples from 1999-2000:

Performance Measurement for BC's New High-Tech Strategy

One of the goals is to make BC the place of choice for high-tech business.

The provincial government introduced its new High-Tech Strategy in July 1999. Its goals are:

- To make BC the place of choice in high-technology business
- To develop and attract outstanding talent to grow the high-technology industry to its full potential
- To strengthen BC's research and development capability and facilitate the commercialization and adoption of high-technology solutions
- To promote BC so that it is recognized internationally and domestically as the place of choice to conduct advanced technology business.

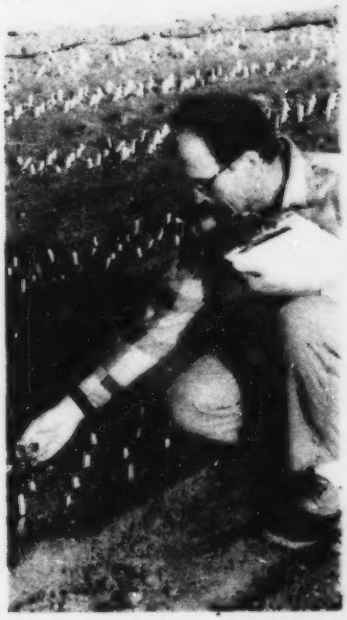
The provincial government asked the Science Council to lead the development of performance measures to evaluate progress under the strategy. A Science Council committee, chaired by Board member Dr. Deborah Poff of the University of Northern BC, is in the process of identifying and implementing performance indicators for each of the four goals of the strategy. The first annual report is scheduled for release in fall 2000. The Science Council has considerable expertise in this area, having recently established a "benchmarking" process for measuring the success of its own activities.

Federal Expenditures on Science and Technology in BC

In June 1999, we brought together representatives of industry, government and the academic community to discuss ways of increasing investment in BC science and technology. This followed a Science Council analysis of federal government expenditures, conducted the previous year. An example of BC's potential was the $32 million in new federal support for a fuel cell initiative based in BC which was announced in August 1999.

Investing in Science and Technology in the Forest Sector

The Science Council is a member of the Committee of Forest Research Agencies (COFRA), a coalition of BC agencies, research institutes, universities and other organizations set up to promote research in forestry and in support of the development of forest products. In December 1999, COFRA provided input on forest research issues to the provincial government's Forest Policy Review. At the same time, and on behalf of COFRA, the Science Council commissioned a study to identify the science and technology needs in the forestry sector, build a business case for increasing investment and develop recommendations. Federal and provincial agencies contributed to the funding of this project which will complement a study undertaken in 1998 that focused on technology in the forest products sector. The report, expected in Summer 2000, will form the basis of a COFRA communications strategy.



Human Resources Development Projects

Human resources development has always been a Science Council focus. It was for this reason that we adopted a Human Resources Development Strategic Plan in June 1999 to complement our human resources funding and job placement programs. It confirms our human resources mission to "support and promote awareness, education and training in science and technology in British Columbia." The plan sets out a course of projects and initiatives, in partnership with other organizations, to serve the needs of everyone, from children in Kindergarten, to adults in the workplace. Activities aim at increasing elementary, secondary and post-secondary student awareness of science and technology careers and helping students and adults to succeed in technology focused careers. Implementation of the plan is underway. Several of the projects that were completed during the year are described on the following pages.

Planning and Analysis

Where are the Women in Science and Technology Jobs?

The number of women employed in Science and Technology in BC continues to grow.

On behalf of an umbrella group of organizations known as Women in Science, Technology, Trades and Engineering (WISTTE), the Science Council oversaw a study of women in high-tech jobs. The results were made public in September 1999. Among other things, the study found that **employment for women in science and technology occupations in BC continues to grow** and that women in this sector are largely satisfied with their career progress. On the other hand, in 1996 (the last year for which detailed statistical information was available), women comprised only 14 to 16 percent of employees in the sector and their earnings ranged from 36 to 94 percent that of men in similar jobs. WISTTE is using the data gathered to plan followup activities, such as Web-based career information for young women.

Migration of Skilled Workers

In 1999, the Science Council formed a partnership with the BC Technology Industries Association and commissioned the Laurier Institution of Vancouver to **gather statistical information and facts about skilled high-tech workers migrating to and from British Columbia.** The study evolved from a provincial Software Skills Summit that identified a significant shortage of software workers for BC's high tech industry. The results, while interesting, were inconclusive. Followup work focuses on initiatives to help attract and retain high tech workers.

Welcome to the Community

In January we piloted a project where industry representatives and post-secondary students **had the opportunity to engage in a discussion around high technology career opportunities in BC businesses.** Promoting career awareness and networking in a smaller forum (with approximately 40 - 50 students and 20 industry representatives) than most career fairs, this allowed for close contact between the potential labour pool and people working in the high tech industry. The UBC event proved very successful and will now be taken to other post-secondary institutions.

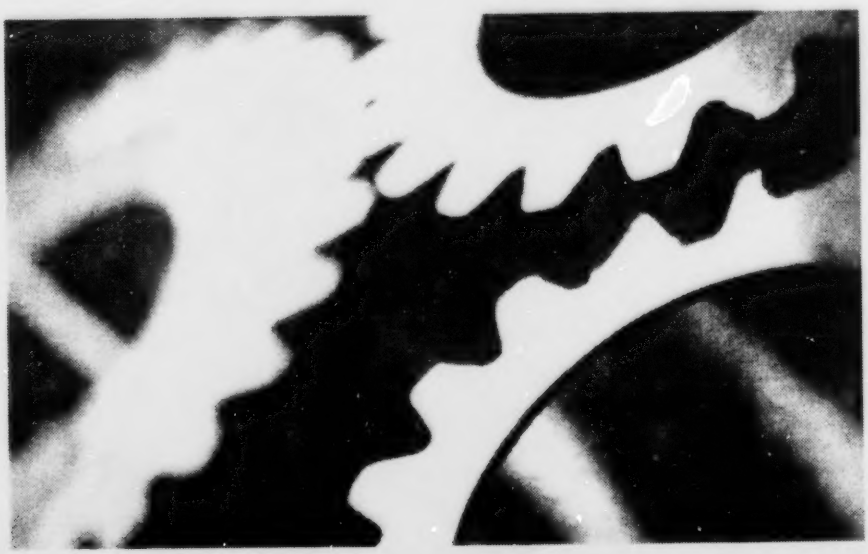
As part of the Science Council's mandate to stimulate economic development in the province, we **help BC companies expand their markets and business contacts internationally.** After all, increased international sales and contracts enable BC companies to expand their production and R&D activities in BC and hire additional staff. The foundation of our international initiatives are the Memoranda of Understanding (MOUs) we have signed with science and technology agencies in several Asia-Pacific countries.

These MOUs have **facilitated links, strategic partnerships and a network of contacts among BC companies,** government partners and their counterparts in the Philippines, China, Taiwan, and other countries in Southeast Asia.

Our International Initiatives web site promotes networking and strategic alliances with other countries.

New International Initiatives Web Site

A major section of the Science Council's newly designed Web site (www.scbc.org) is devoted to International Initiatives. There, visitors will find details of the MOUs and what projects were initiated under these agreements, **links to BC-based international science and technology contacts and resources,** an international technology trade events calendar and information about technology-oriented workshops and exhibitions.



International Activities

Other International Events and Activities

In December 1999, as part of the celebrations surrounding the 50th anniversary of the Peoples' Republic of China, the Science Council, the Canada China Business Council and the BC Chapter of the Canadian Environment Industry Association (CEIA-BC) presented a half-day seminar, "Exploring technology and environment challenges in China." The 80 participants came mainly from small and medium-sized BC environment and natural resource companies. **They learned about project opportunities and heard from senior representatives of companies experienced in environment projects,** who shared their experiences and lessons learned in winning and completing projects in China.

Closer to home, we continued to offer our popular one-day seminar, "Helping your company grow internationally." The Science Council partnered with the Mid-Island Science, Technology and Innovation Council to offer it in Nanaimo on April 22, and with the Science Council of BC - Okanagan, in Kelowna on May 6. **The seminar, tailored to regional needs, described federal and provincial programs that offer marketing and financial support** and services to small and medium-sized companies interested in expanding their markets overseas.

Finally, BC Employment and Investment Minister Gordon Wilson was among the dignitaries from Canada and China at a luncheon during the **Globe 2000 conference and trade show in Vancouver** in March. The event was organized by the Science Council, CEIA-BC, the BC Trade and Investment Office and the Chinese Entrepreneurs Society of Canada, to introduce Globe 2000 delegates from China to BC environment companies. Delegates from Beijing, Shanghai, Hong Kong, Guangdong and Chongqing were among the more than 200 people who attended.

International Science & Technology Mission Highlights 1993 - 2000

- *1993 China & Taiwan*
- *Seattle, USA*
- *1998 Philippines (2 missions)*

Regional Initiatives

The Science Council has a province-wide mandate. Accordingly, we have always placed a high priority on ensuring that every BC region has access to information about science and technology, that young people are aware of career opportunities in this sector, and that the social and economic benefits of science and technology are enjoyed by all British Columbians.

Acting as a conduit for information has contributed to increased awareness about opportunities that are available throughout the province.

In keeping with our mandate, the Regional Initiatives Advisory Committee was established this year to identify and recommend initiatives that will help Council meet its responsibilities in this area. In addition to board members, the committee includes representatives from regional and provincial organizations. Delivering on the mandate is a task that is also addressed operationally by other areas of Science Council. This has resulted in extensive sharing of resources to maximize the results of our combined efforts.

Beginning in the early 90's, Science Council and the provincial government worked with local communities to establish the regional, science, technology and innovation council program, and by 1996 there were seven councils located throughout British Columbia. As the councils developed and matured, the move to independence was a natural evolution and in 1998 three Regional Councils determined that they would like to separate and operate under the Society Act of BC, as non-profit organizations. This evolutionary process continued so that by March 31, 2000, all Regional Councils were operating as non-profit societies.

In many ways the Science Council acted as an incubator for the councils. Administration, support and delivery of the Regional Council program served to provide the Science Council with a very visible presence in the province. We continue to network with the Regional Councils to promote the benefits of science and technology and we collaborate with other like-minded federal, provincial and regional organizations to increase awareness about opportunities, programs, services and events that are available to assist the small and medium-sized entrepreneur: technology access centres; industry technology advisors, industry associations, academic institutions, economic development organizations, community access programs and Chambers of Commerce, to name a few.

In response to requests for funding support for projects within the regions, we introduced the Regional Initiatives Innovation Fund in 1999/2000. Introduced as a pilot project, the program was designed to encourage innovation, partnerships and new projects that would address the unique needs and interests of the regions.

Awards and Recognition

BC Science & Technology Awards

The Science Council established the prestigious BC Science & Technology Awards in 1980. They remain the province's highest recognition of outstanding achievements by BC scientists, engineers, industrial innovators and science communicators. The 1999 winners were:

Business/Education Partnership: Dr. John Bird, Simon Fraser University, and Mr. James Ferguson, International Submarine Engineering Research, Port Coquitlam

Dr. Bird and Mr. Ferguson have developed novel sonar, positioning systems and fully autonomous underwater vehicles for the scientific subsea research community, governments and the commercial underwater survey industry.

Career Achievement: Dr. J. Ross Mackay, University of British Columbia

Dr. Mackay is recognized as the world's foremost authority on many of the processes that create the unique landforms and permafrost structures of Arctic environments.

Cecil Green Award for Technology Entrepreneurship: Dr. Ken Spencer

Dr. Spencer is co-founder of Burnaby-based CREO Products, the world's largest supplier of computer-to-plate printing systems. He is acting as a mentor to some of BC's most promising new high-tech entrepreneurs.

New Frontiers in Research: Dr. Verena Tunnicliffe, University of Victoria

Dr. Tunnicliffe has won worldwide acclaim for her discoveries regarding the unique animals that live by deep-sea vents in the Pacific Ocean, off our coast.

Solutions Through Research: Dr. Charles Laszlo, University of British Columbia / A.L.D.S. Inc.

Among the many innovations Dr. Laszlo and his colleagues have developed for people with hearing loss is "FlightSound." It enables hard-of-hearing airline passengers to communicate with cabin staff and understand in-flight messages and safety instructions.

Young Innovator: Dr. Calum MacAulay, BC Cancer Agency

Dr. MacAulay and his colleagues have developed innovative imaging systems that can be used to identify cancer cells inside the body. Some of their systems are now patented and commercialized.

Student Recognition Programs

An important component of our human resources focus is to recognize the achievements of elementary and secondary students in science and technology. Our goal is to encourage many of them to continue their studies in this field. Last year we continued three key initiatives that recognize student achievement

Science Fair Recognition

The 66 BC students who exhibited at the 1999 Canada-Wide Science Fair in Edmonton, Alberta were guests of the Science Council at the BC Science & Technology Awards Dinner in October. The Science Fair team of Meghan Karner and Geoff Waterman spoke to the 800 attendees on behalf of the students.

The Science Council encourages BC students to continue their studies in Science and Technology.

Turning Ideas into Solutions Award

Each year, the Science Council offers a cash award to the student and supervising teacher in each of the 13 BC Regional Science Fairs, whose exhibit best demonstrates or investigates the application of science and technology to economic development and the improvement of BC's quality of life. Students receive a $100 cash prize for educational materials and teachers receive $500 to be used to support their school's science fair activities.

Headed for Success Award

Last spring we presented the Headed for Success prize of an electronic organizer to the top science student in the graduating class at 270 high schools throughout BC in partnership with the BC Science Teachers' Association.

Communications and Marketing

Our Communications and marketing activities are aimed at increasing awareness of the Science Council's programs, initiatives and events and helping the Science Council and the Ministry of Advanced Education, Training and Technology achieve their goal of improved public awareness of science and technology achievements and opportunities.

Publications

Council's newsletter, SYNAPSE, was published six times during the year. With each issue's circulation at 8,000, **SYNAPSE has become one of BC's most widely read science and technology publications.** SYNAPSE was redesigned in the summer of 1999.

As required by the Science Council Act, we also published an Annual Review, summarizing our previous year's programs, activities, income and expenditures, for presentation to the Legislature.

We also sponsored the publication of several feature articles and supplements on science and technology topics.

Web Site

As a supporter of advanced technology, the Science Council is committed to greater use of the Internet. **This past year we gave our Web site a complete design and functional overhaul.** The new site (www.scbc.org) is more dynamic, easier to explore and full of valuable information and links.

Innovation Management Association of Canada

In late September, the Science Council hosted the annual conference of the Innovation Management Association of Canada (IMAC). IMAC members direct and manage research programs for Canadian industry, universities, institutes and other organizations. **Over 100 senior delegates from across the country attended the sessions** and toured some of BC's leading high-tech firms, agencies and research institutions.

Frontiers of Discovery

As usual, a highlight of our annual Awards Dinner on October 18 was the premiere of the video documentaries on the winners. **Our winners are excellent role models for young people considering careers in science or engineering,** so the videos are offered to BC schools throughout the province under the title "Frontiers of Discovery." Visitors to our Web site can now also view the latest "Frontiers of Discovery" videos.

Our S&T Award winners are excellent role models for BC youth.

Science and Technology Awareness Survey

In the spring of 1999 the Science Council and Science World British Columbia commissioned a study of public attitudes to and awareness of science and technology. Professional interviewers carried out a random telephone survey of 500 British Columbia residents. Among the study's findings:

- The people of BC are strongly supportive of the importance of science and technology in the economy and the skill set within the workforce, both at present and in the future.
- Eighty-eight percent agree (57% strongly) that "public funds should be provided to encourage interest in science and technology among young people."
- Eighty-one percent agree (47% strongly) that "public funds should be provided to encourage research and development in our technology industries."
- The Internet has become the primary source of information about science and technology. Thirty five percent of those surveyed reported that they would use the Internet to seek this kind of information.

Our Volunteers Are Vital

The Science Council could not function without the help from our valuable volunteers.

Throughout BC, busy people took time from their work last year to assist the Science Council in carrying out its mandate. They include over 400 scientists, engineers, entrepreneurs, business people, educators, marketing and communication specialists, researchers, consultants and many other **professionals from the private and public sectors.** Each spent dozens of hours reviewing applications to our programs and providing advice that enabled us to make informed choices in our many activities. These volunteers are vital to our operations and without them the Science Council could not function.

In the spring of 1999, we commissioned an extensive survey of our volunteers. Questionnaires were sent to 829 Science Council or Regional Council volunteers, 457 of whom were still active. **The results gave us a better idea of who our volunteers are, where they live and why they are willing to serve BC in this way.** We learned, for example, that 60% of the 320 past and present volunteers who responded to the questionnaire live outside the Lower Mainland, and that 66% of them work for organizations employing more than 10 people. Moreover, volunteers are positive about their experience with Science Council and 30% have been volunteers since 1993 or before!

There are many reasons why they donate their time. Some say it helps them keep in touch with leading edge innovation in BC. Others look upon this as a way of giving back the support they have received from others.

1999/2000 Financial Review

Science Council of British Columbia

Financial Statements
31 March 2000

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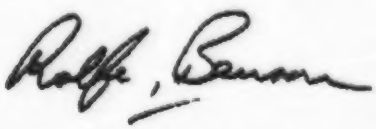
AUDITOR'S REPORT

To the Board of Directors of the Science Council of British Columbia and to the Minister of Advanced Education, Training and Technology,

We have audited the statement of financial position of Science Council of British Columbia as at 31 March 2000 and the statements of operations and appropriations, and cash flows for the year then ended. These financial statements are the responsibility of the Council's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with generally accepted auditing standards. Those standards require that we plan and perform an audit to obtain reasonable assurance whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In our opinion, these financial statements present fairly, in all material respects, the financial position of the Council as at 31 March 2000 and the results of its operations for the year then ended in accordance with generally accepted accounting principles.



CHARTERED ACCOUNTANTS

Vancouver, Canada
12 May 2000

Statement of Financial Position
31 March 2000

	Base	Regional Initiatives	Technology B.C.	Student Summer Works	Forest Renewal B.C.	B.C. STIP	Fisheries Renewal B.C.	Capital Assets	Total 2000	Total 1999
	$	$	$	$	$	$	$	$	$	$
Assets										
Current										
Cash and short-term investments	7,091,228	-	-	-	2,761,300	-	-	-	9,852,528	10,543,860
Accounts receivable	263,966	-	-	-	-	-	-	-	263,966	165,479
Awards and contributions receivable	73,500	-	724,594	-	5,491,832	268,375	32,500	-	6,590,801	10,651,154
Interest receivable	89,428	-	-	-	-	-	-	-	89,428	79,617
Prepaid expenses	125	-	-	-	-	-	-	-	125	36,868
Due from Base	-	69,103	4,888,265	-	1,011,133	451,704	-	-	6,420,205	9,139,272
	7,518,267	69,103	5,612,859	-	9,264,265	720,079	32,500	-	23,217,073	30,616,270
Capital Assets (Note 3)	-	-	-	-	-	-	-	328,769	328,769	435,300
	7,518,267	69,103	5,612,859	-	9,264,265	720,079	32,500	328,769	23,545,842	31,051,570
Liabilities										
Current										
Bank overdraft	-	-	-	-	-	-	-	-	-	641,799
Accounts payable and accrued liabilities	173,583	-	-	-	-	-	-	-	173,583	241,918
Accrued awards and projects	835,644	69,103	5,526,491	-	7,270,265	720,079	28,184	-	14,449,766	16,046,578
Due to restricted funds	6,414,809	-	-	-	-	-	5,396	-	6,420,205	9,139,272
	7,424,036	69,103	5,526,491	-	7,270,265	720,079	33,580	-	21,043,554	26,069,567
Appropriations										
Invested in capital assets	-	-	-	-	-	-	-	328,769	328,769	435,300
Externally restricted	94,231	-	86,368	-	-	-	(1,080)	-	179,519	2,523,973
Unrestricted	-	-	-	-	1,994,000	-	-	-	1,994,000	2,022,730
	94,231	-	86,368	-	1,994,000	-	(1,080)	328,769	2,502,288	4,982,003
	7,518,267	69,103	5,612,859	-	9,264,265	720,079	32,500	328,769	23,545,842	31,051,570

APPROVED BY THE COUNCIL:

J.K. Reichert
Member and President

Barry Jinks
Member and Audit Committee Chair

The attached notes are an integral part of these financial statements.

SCIENCE COUNCIL OF BRITISH COLUMBIA

Statement of Operations and Appropriations
For the Year Ended 31 March 2000

	Base	Regional Initiatives	Technology B.C.	Student Summer Works	Forest Renewal B.C.	B.C. STIP	Fisheries Renewal B.C.	Capital Assets	Total 2000	Total 1999
	$	$	$	$	$	$	$	$	$	$
Revenue										
Contributions from the Information, Science and Technology Agency										
Base budget	2,290,000	-	-	-	-	-	-	-	2,290,000	2,840,000
Regional network	-	329,541	-	-	-	-	-	-	329,541	520,000
Technology B.C.	-	-	4,000,000	-	-	-	-	-	4,000,000	4,500,000
Forest Renewal B.C.	-	-	-	-	14,693,934	-	-	-	14,693,934	24,951,549
B.C. STIP	-	-	-	-	-	553,714	-	-	553,714	714,661
Fisheries Renewal B.C.	-	-	-	-	-	-	325,000	-	325,000	-
I.B.M. Development Scholarship	115,000	-	-	-	-	-	-	-	115,000	-
Special projects	90,000	-	-	-	-	-	-	-	90,000	32,000
Student Summer Works	-	-	-	442,222	-	-	-	-	442,222	412,620
Computers for schools	505,455	-	-	-	-	-	-	-	505,455	349,544
Interest	141,961	1,835	174,676	569	217,852	17,218	602	-	554,713	678,567
Other income	168,152	79,911	-	-	-	-	-	-	248,063	176,842
	3,310,568	411,287	4,174,676	442,791	14,911,786	570,932	325,602	-	24,147,642	34,975,784
Expenditures										
Science & Technology Award Programs										
Technology B.C.	-	-	5,733,813	-	-	-	-	-	5,733,813	5,423,650
Human Resource Award Programs										
GREAT	1,430,857	-	-	-	-	-	-	-	1,430,857	1,310,142
IPDF	-	-	-	-	-	-	-	-	-	75,000
STARS	-	-	-	-	-	-	-	-	-	17,000
Student Summer Works	-	-	-	412,128	-	-	-	-	412,128	380,447
Forest Renewal B.C. Award Programs										
Forest Renewal B.C.	-	-	-	-	16,160,726	-	-	-	16,160,726	27,457,950
Wood Products Internship	-	-	-	-	23,250	-	-	-	23,250	68,880
B.C. STIP	-	-	-	-	-	563,602	-	-	563,602	762,470
Regional Initiatives Programs										
Regional councils, networks	-	438,734	-	-	-	-	-	-	438,734	678,226
Regional projects	-	-	-	-	-	-	-	-	-	9,754
Computers for schools	495,610	-	-	-	-	-	-	-	495,610	349,544
Fisheries Renewal B.C.	-	-	-	-	-	-	281,935	-	281,935	-
I.B.M. Development Scholarship	115,000	-	-	-	-	-	-	-	115,000	-
Communications and recognition	440,304	-	-	-	-	-	-	-	440,304	458,458
Special projects	183,793	-	-	-	-	-	-	-	183,793	113,650
International	32,699	-	-	-	-	-	-	-	32,699	52,748
Operations	1,632,872	-	302,090	30,745	692,036	20,297	44,748	111,185	2,833,973	2,775,651
	4,331,135	438,734	6,035,903	442,873	16,876,012	583,899	326,682	111,185	29,146,423	39,931,570
Excess (deficiency) of revenue over expenditures	(1,020,567)	(27,447)	(1,861,227)	(82)	(1,964,226)	(12,967)	(1,080)	(111,185)	(4,998,781)	(4,955,786)
Reduction in commitments and refunds	48,516	-	504,870	-	1,935,496	30,184	-	-	2,519,066	5,060,909
Excess (deficiency) of revenue over expenditures after reductions	(972,051)	(27,447)	(1,356,357)	(82)	(28,730)	17,218	(1,080)	(111,185)	(2,479,715)	105,123
Transfers	65,363	(52,882)	-	82	-	(17,217)	-	4,654	-	-
Excess (deficiency) of revenue over expenditures after reductions and transfers	(906,688)	(80,329)	(1,356,357)	-	(28,730)	-	(1,080)	(106,531)	(2,479,715)	105,123
Appropriations - beginning of year	1,000,919	80,329	1,442,725	-	2,022,730	-	-	435,300	4,982,003	4,876,879
Appropriations - end of year	94,231	-	86,368	-	1,994,000	-	(1,080)	328,769	2,502,288	4,982,003

Statement of Cash Flows
For the Year Ended 31 March 2000

	Base	Regional Initiatives	Technology B.C.	Student Summer Works	Forest Renewal B.C.	B.C. STIP	Fisheries Renewal B.C.	Capital Assets	Total 2000	Total 1999
	$	$	$	$	$	$	$	$	$	$
Cash provided for (used in):										
Operating activities										
Excess (deficiency) of revenues over expenditures after reductions and transfers	(906,688)	(80,329)	(1,356,357)	-	(28,730)	-	(1,080)	(106,531)	(2,479,715)	105,123
Add(deduct) non-cash transactions	-	-	-	-	-	-	-	111,185	111,185	129,932
Changes in non-cash working capital balances										
Accounts receivable	(98,507)	-	-	-	-	-	-	-	(98,507)	(121,505)
Grants receivable	(73,500)	-	(5,261)	-	4,425,327	(253,714)	(32,500)	-	4,060,352	4,311,003
Interest receivable	(9,811)	-	-	-	-	-	-	-	(9,811)	(35,610)
Prepaid expenses	36,763	-	-	-	-	-	-	-	36,763	(5,588)
Accounts payable	(68,335)		-	-	-	-	-	-	(68,335)	(331,737)
Accrued awards and projects	386,036	(46,465)	400,738	-	(2,530,071)	164,768	28,184	-	(1,596,811)	(6,267,113)
	(734,042)	(126,795)	(960,880)	-	1,866,526	(88,947)	(5,396)	4,654	(44,879)	(2,215,495)
Investing activities										
Purchase of capital assets	(4,654)	-	-	-	-	-	-	-	(4,654)	(28,239)
Financing activities										
Deferred revenue	-	-	-	-	-	-	-	-	-	(200,000)
Net increase (decrease) in cash	(738,696)	(126,795)	(960,880)	-	1,866,526	(88,947)	(5,396)	4,654	(49,533)	(2,443,734)
Cash position (deficiency) - beginning of year	10,543,860	-	-	-	(641,799)	-	-	-	9,902,061	12,345,795
Interfund transfers	(2,713,936)	126,794	960,880	-	1,536,573	88,947	5,396	(4,654)	-	-
Cash position - end of year	7,091,228	-	-	-	2,761,300	-	-	-	9,852,528	9,902,061
Represented by:										
Cash and short term investments	7,091,228	-	-	-	2,761,300	-	-	-	9,852,528	10,543,860
Bank overdraft	-	-	-	-	-	-	-	-	-	(641,799)
	7,091,228	-	-	-	2,761,300	-	-	-	9,852,528	9,902,061

SCIENCE COUNCIL OF BRITISH COLUMBIA

Notes to the Financial Statements
For the Year Ended 31 March 2000

1. Statement of Purpose

The Science Council of British Columbia was established in 1978 under the Science Council of British Columbia Act. In 1989, the Science Council of British Columbia and the Secretariat on Science, Research and Development were amalgamated pursuant to the Science Council Act, Chapter 77, and continued as the Science Council of British Columbia ("Science Council").

The Science Council's mission is to promote economic development and enhance the quality of life in British Columbia through innovative applications of science and technology. The following funds are represented in the financial statements:

(a) Base

The Base fund accounts for the Science Council's general program delivery and administrative activities, including GREAT scholarships, on behalf of the Information, Science and Technology Agency (ISTA).

(b) Regional Initiatives

This fund was established to foster, in all areas of British Columbia, a culture which values science, technology, innovation and entrepreneurship in order to maintain industry competitiveness and a high standard of living, on behalf of ISTA (Note 6).

(c) Technology B.C.

The purpose of the Technology B.C. program is to stimulate scientific research and the use of technology applicable to economic development in the province by providing funding for applied research and development in various economic sectors and in eligible technologies, on behalf of ISTA.

(d) Student Summer Works

This program is a Youth Options B.C. initiative which creates opportunities for work experience and skills training for youth and improves access to post secondary education. This is done by subsidizing wages paid by employers to high school and post secondary students during summer employment, on behalf of the Ministry of Advanced Education, Training and Technology.

(e) Forest Renewal B.C. (FRBC)

The purpose of the FRBC research program is to fund research and development projects that add to the knowledge base needed to sustain the full range of resources and values derived from the forest, and to build a more productive provincial forest sector, on behalf of Forest Renewal B.C.

(f) B.C. Science & Technology Infrastructure Program (B.C. STIP)

This program provides funds to institutions in order to assist them in the preparation of proposals for funding to the Canada Foundation for Innovation (CFI). Successful applications are required to have CFI funds matched by income from other sources, and this program also provides a portion of those funds, on behalf of Discovery Foundation.

Notes to the Financial Statements
For the Year Ended 31 March 2000

1. Statement of Purpose - *continued*

(g) Fisheries Renewal B.C. (F.S.R.B.C.)

The purpose of the F.S.R.B.C. research program is to fund research and development projects which will assist in the rebuilding of the fisheries industry in B.C.

(h) Capital Assets

This fund accounts for capital assets acquired by the Science Council.

2. Accounting Policies

(a) Financial Instruments

The Science Council's financial instruments consist of cash and short-term investments, accounts receivable, awards receivable, accounts payable and accrued awards and projects payable. Unless otherwise noted, it is management's opinion that the Science Council is not exposed to significant interest, currency or credit risks arising from these financial instruments. The fair values of these financial instruments approximate their carrying values, unless otherwise noted.

(b) Basis of Accounting for Revenues, Expenditures and Appropriations

The Science Council follows the restricted fund method of accounting for contributions under which separate details of the financial statement elements are reported as either restricted or unrestricted.

Award revenues are accounted for in the year the government organization commits to disburse the award amounts to the Science Council.

Full provision is made for all accrued liabilities at 31 March 2000, including outstanding Program commitments payable within the following year, which are accrued when committed.

(c) Restricted and Unrestricted Appropriations

No provision has been made for future operational expenses required for normal delivery of existing programs.

(d) Short-term Investments

Short-term investments are recorded at the lower of cost and market value.

(e) Capital Assets

Capital assets with a value greater than $2,000 are recorded at cost and amortization is provided for at the following annual rates:

Furniture, fixtures and equipment	20% declining balance
Computer hardware and software	33 1/3% declining balance
Leasehold improvements	70 months straight-line

Notes to the Financial Statements
For the Year Ended 31 March 2000

3. Capital Assets

	Cost	Accumulated Amortization	Net Book Value 2000	Net Book Value 1999
Furniture, fixtures and equipment	$ 44,945	$ 22,854	$ 22,091	$ 27,615
Computer hardware and software	285,982	183,962	102,020	147,211
Leasehold improvements	325,592	120,934	204,658	260,474
	$ 656,519	$ 327,750	$ 328,769	$ 435,300

The capital asset fund balance comprises the following:

	2000	1999
Transfers from other programs, included in operations expenditures in those programs.	$ 330,927	$ 326,272
Non-repayable tenant inducement amortized over the remaining term of the premises lease.	125,000	125,000
Tenant inducements, to be repaid over the lease term as an increase in monthly premises rental payments, amortized over the remaining term of the premises lease (Note 6). As at 31 March 2000, $131,818 remains to be amortized.	200,592	200,592
	656,519	651,864
Less: Accumulated amortization	(327,750)	(216,564)
	$ 328,769	$ 435,300

4. British Columbia Technology For Learning Society ("Society")

These statements include the operating results of the Society (Computers for Schools Program) which is a related entity to the Science Council.

5. Commitments

The Science Council is committed to lease office premises until 31 January 2004 at a monthly rental of approximately $36,729. The Science Council is also committed to lease two photocopiers until 31 December 2003 at a monthly rental of approximately $1,537. During the year, the Science Council committed to lease a fax machine until 31 August 2002 at a monthly rental of $105.

5. Commitments - *continued*

Total commitments for the next five fiscal years are as follows:

2001	$ 460,449
2002	459,714
2003	454,580
2004	367,293
2005	-
	$ 1,742,036

6. Regional Initiatives

During the year, the four remaining regional Councils separated from the Science Council of British Columbia. They will function as independent societies as of 1 April 2000.

Agriculture and Foods

Dr. K.R. Patel $45,000
AgriForest Bio-Technologies Ltd.
Kelowna
Selection and Commercialization of High Yielding Varieties of the Medicinal Plant Sea Buckthorn

Aquatic Resources

Mr. R. Beecroft $69,640
Immuno-Precise Antibodies Ltd.
Victoria,
Monoclonal Antibodies to Atlantic Salmon (Salmo salar) and Rainbow Trout (oncorhynchus mykiss) T-cells: Characterization and Applicability in Immunoassays and Cell Separation

Mr. J. Henry $105,435
Target Marine Hatcheries Ltd.
Sechelt
Sex Control in Coho Salmon

Mr. R. Saunders $74,868
Island Blackcod Partnership
Qualicum Beach
Development of a Dedicated Hatchery for Production of Sablefish (Anoplopoma fimbria) Juveniles

Biotechnology

Dr. M. Bally $200,000
Celator Technologies Inc.
Vancouver
Development of Macromolecular Therapeutic Complexes: Defining the Base Technology

Mr. A. Duncan $200,000
Chromos Molecular Systems Inc.
Burnaby
Development of a Novel, Rapid and Precise Method for Engineering Artificial Chromosome Expression Systems

Mr J. Grushcow $163,475
Linnaeus Plant Sciences
Vancouver
Transgenic Industrial Oil Crop Development

Mr. H. MacNaught $186,182
Chirologix Pharmaceuticals Inc.
North Vancouver
Commercialization of a Novel Class of Antibacterials

Dr. Jasbinder Sanghera $117,430
Kinetek Pharmaceuticals
Vancouver
Lead Optimization of ILK and PKB Inhibitors

Mr. K. Sarafis $153,000
Interomex Biopharmaceuticals Inc.
Delta
Protein-Protein Interaction Map of the HIV-1 Virus and its Host T-Cell

Mr. W. Swim $150,000
Viridae Clinical Sciences Inc.
Vancouver
Monitoring Antiviral Drug Toxicity and Metabolites by Capillary Electrophoresis

Computers and Computing

Mr. I. Cheng $105,500
Millennium Technology Inc.
Vancouver
Magnetic Resonance Image Denoising and Compression using Wavelets

Mr. B. Copeland $180,000
Credo Interactive Inc.
Vancouver
I-Move, Intelligent Motion Video Extraction

Mr. M. Dostie $197,248
EMedialT Solutions Inc.
Vancouver
Development of eMedialT's Content Management System

Dr. R. Kheraj $190,000
Knowledge Junction Systems
Coquitlam
Concise Match Configurator

Mr. M. Lebowitz $200,000
Thoughtshare Communications
Vancouver
ThoughtShare WebDesk Client Software Phase 1

Ms. D. Michael $200,000
Radical Technology Inc.
Vancouver
Game Studio

Mr. S. Moffatt $100,000
Sheltair Scientific Ltd.
Vancouver
Development of an Urban Forecasting Information System

Mr. T. Whin-Yates $200,000
CPAL Crime Prevention Analysis Labs Inc.
Burnaby
Motor Vehicle Theft (MVT) Crime Analysis Program

Electronics and Communications

Mr. D. Beaudoin $150,000
EXI Wireless Systems Inc.
Richmond
A Bluetooth RFID System

Dr. N. Cox $200,000
Sentry Telecom Systems Inc.
Burnaby
Development of the PhonewallTM: a Firewall for PBX's

Mr. K. Fielding $198,813
Delta-Q Technologies Corp.
Vancouver
"QuiQ" Integrated Power Systems Development Project for the Industrial and Specialty Electric Vehicle Industry

Dr. R. Hobson $199,458
Cogent ChipWare Inc.
Coquitlam
A System-On-Chip Architecture for Parallel Digital Voice Coding

Dr. D. Inkster $118,922
Tactex Controls Inc.
Victoria
Development of a Touch Pad Controller

Energy and Energy Technologies

Mr. A. Mezheritsky $116,500
M.A. Turbo/Engine Design
Vancouver
Modified Air Supply System for Internal Combustion Engines

Mr. D. Stevenson $184,020
Membrane Reactor Technologies Ltd.
Vancouver
Technical Development and Testing of the Fluidized Bed Membrane Reactor

Environmental Technologies and Waste Management

Dr. R. Stephenson $100,000
Paradigm Environmental Technologies Inc.
Vancouver
MicroSludge Process to Destroy Biosolids

Health Technology

Mr. G. Beatch $160,000
Nortran Pharmaceuticals Inc.
Vancouver
Electrophysiology Program

Mr. P. Berrang $99,700
Epic Biosonics Inc.
Victoria
Development of Two Components of the Epic Biosonics Inc. Cochlear Implant

Dr. J.A. Hoffer $119,272
NeuroStream Technologies Inc.
Anmore
Nerve Cuffs for Neural Prosthesis

Dr. H. Pritchard $94,688
Forbes Medi-Tech Inc.
Vancouver
Novel Biological Activities of Sterols: Structure Function Relationships for Phytosterol Analogues

Dr. H. Pritchard $58,400
Forbes Medi-Tech Inc.
Vancouver
Cholesterol Lowering and Anti-Artherosclerotic Effects of Phytosterols: Possible Synergistic Effects of Omega-3 Fatty Acids and Nicotinic Acid

Dr. T. Thomas $161,255
StemCell Technologies Inc.
Vancouver
Development of a Process to Enrich Tumour Cells (StemSeptm TE)

Manufacturing and Machinery

Mr. M.H. Kirby $103,950
Questor Industries Inc.
Burnaby
Large Rotary Valve for Hydrogen Pressure Swing Adsorption

Mr. L. Kuzik $102,091
Canada Conveyor Belt Co. Ltd.
Surrey
Device to Detect Anomolies in the Magnetically Permeable Members of a Steel Wire Rope

Dr. Shahram Tafazoli $89,500
Motion Metrics Inc.
Vancouver
Dynamic Payload Monitoring System for Multi-Link Hydraulic Manipulators

Mr. H. Watson $90,750
Metro Testing Laboratories Ltd.
Burnaby
Dynamic Modulus Based Pavement Evaluation and Design Procedure

Mining, Minerals and Metals

Mr. I. Grewal $81,500
Knelson Concentrators
Langley
Development Evaluation and Modelling of a Continuous Centrifugal Gravity Concentrator

Mr. B. Marchant $144,233
Biomet Mining Corp.
Richmond
BioSulphide Process Demonstration Plant and Feasibility Study

Total (39 projects) ***$5,943,563***

Award commitments for the various programs may differ from original awards committed due to adjustments, reduction in commitments, refunds and awards declined during the year.

GREAT: GRADUATE RESEARCH, ENGINEERING & TECHNOLOGY SCHOLARSHIPS

New Awards

Mr. M. Adamcyk $7,600
Dr. T. Tiedje
UBC, Physics
Rogers Canadian Cable Labs Fund
Burnaby

Mr. J. Allison $20,000
Dr. J. Borden
SFU, Biological Sciences
Bugbusters Pest Management Inc.
Prince George
Phero Tech Inc.
Delta
Millar Western Forest Products Ltd.
Whitecourt

Mr. A. Asalemi $20,000
Dr. J. Howie
UBC, Civil Engineering
Klohn Crippen Consultants Ltd.
Richmond
Conetec Investigations Ltd.
Vancouver
Foundex Explorations Ltd.
Surrey
Geopac West Ltd.
New Westminster

Ms. S. Bates $20,000
Dr. A. Kermode
SFU, Biological Sciences
Pacific Regeneration Technologies Ltd.
Armstrong
Vernon Seed Orchard
Vernon
Weyerhauser Canada Ltd.
Armstrong
Phero Tech Inc.
Delta
Kalamalka Seed Orchard
Vernon

Mr. N. Borecky $20,000
Dr. R. Ring
UVic, Biology
Pacific Forestry Centre
Victoria
Pope and Talbot Ltd.
Nakusp
Revelstoke Community Forest Corp.
Revelstoke
Riverside Forest Products Ltd.
Armstrong
Downie Timber Ltd.
Revelstoke

Mr. P. Constantineau $20,000
Dr. J. Grace
UBC, Chemical and Bio-Resource Engineering
Cominco Research
Trail

Mr. T. Davies $20,000
Dr. C.A. McDevitt
Dr. K. Hall
UBC, Institute for Resources and Environment
BC Research Inc.
Vancouver

Mr. S. Dumitrescu $20,000
Dr. P. Hill
UBC, Mechanical Engineering
Westport Research Inc.
Vancouver

Mr. L. Filipozzi $20,000
Dr. T. Salcudean
UBC, Electrical and Computer Engineering
International Submarine Engineering
Port Coquitlam

Ms. K. Hannam $20,000
Dr. C. Prescott
UBC, Forest Sciences
Western Forest Products Ltd.
Saanichton

Ms. K. Heise $20,000
Dr. J. Smith
UBC, Zoology
Imagenex Technology Corp.
Port Coquitlam

Ms. L. Johnson $20,000
Dr. J. Ferris
UBC, Pathology and Laboratory Medicine
Criterion Service Laboratory Inc.
Vancouver

Mr. H. Jurk $20,000
Dr. A. Trites
UBC, Marine Mammal Research Unit
Vancouver Aquarium
Vancouver

Mr. M. Keshmiri $20,000
Dr. T. Troczynski
UBC, Metals and Materials Engineering
Interstyle Ceramics and Glass Ltd.
Burnaby

Mr. A. Koumoutsakos $20,000
Dr. S. Avramidis
UBC, Wood Science
Heatwave Drying Systems Ltd.
Castlegar

Mr. N. Kwon $20,000
Dr. P. Driessen
UVic, Electrical and Computer Engineering
AVT Audio Visual Telecommunications Corp.
Cobble Hill

Mr. F. Lam $20,000
Dr. P. Reiner
Dr. A. Buchan
UBC, Psychiarty
Active Pass Pharmaceuticals
Vancouver

Mr. D. Leung $20,000
Dr. S. Sacks
Dr. Deborah Money
UBC, Pharmacology and Therapeutics
Viridae Clinical Sciences
Vancouver

Ms. L. Louie $20,000
Dr. P. Cullis
UBC, Biochemistry and Molecular Biology
Inex Pharmaceuticals Corp.
Burnaby

Ms. M. Luca $20,000
Dr. L. Edelstein-Keshet
UBC, Mathematics
IGT Pharma Inc.
Vancouver

Mr. A. Moise $11,200
Dr. S. Atkins
SFU, Computing Science
A.L.I. Technologies Inc.
Richmond

Mr. I. Moss $20,000
Dr. P. Marshall
UBC, Forestry
Lignum Ltd.
Vancouver

GREAT: Graduate Research, Engineering & Technology Scholarships

Mr. J. Mullan $20,000
Dr. G. Gries
SFU, Biological Sciences
BC Hot House Growers Association
Surrey
IPM Technologies (Canada) Inc.
Vancouver

Mr. T. Nilsen $20,000
Dr. A. Buchan
UBC, Physiology
QLT PhotoTherapeutics Inc.
Vancouver

Ms. M. Noullett $7,700
Dr. P. Jackson
UNBC, Faculty of Natural and Environmental Studies
Jacques Whitford Environmental Ltd.
Burnaby

Mr. J. Paczkowski $20,000
Dr. R. Wheate
UNBC, Geography
The Pas Lumber Co. Ltd.
Prince George
Spruce City Wildlife Association
Prince George

Mr. K. Pardee $20,000
Dr. C. French
Dr. N. Towers
UBC, Botany
Phyto Diagnostics Company Ltd.
Sidney

Mr. L. Paul $20,000
Dr. C. Chanway
UBC, Soil Sciences / Forestry
Riverside Forest Products Ltd.
Williams Lake

Ms. A. Sandhu $20,000
Dr. P. Cullis
UBC, Biochemistry and Molecular Biology
Inex Pharmaceuticals Corp.
Burnaby

Ms. J. Schemeisser $20,000
Dr. S. Holdcroft
SFU, Chemistry
Ballard Advanced Materials Corp.
Burnaby

Mr. E. Schiefer $20,000
Dr. O. Slaymaker
UBC, Geography
Beak International Inc.
Vancouver

Mr. B. Sieben $20,000
Dr. S. Tuller
UVic, Geography
Weyerhaeuser Canada
Nanaimo
BC Hydro
Burnaby

Mr. V. Srivastava $20,000
Dr. J. Saddler
UBC, Wood Science
Forintek Canada Corp.
Vancouver

Ms. A. Varga $20,000
Dr. A. Glass
UBC, Botany
BC Research Inc.
Vancouver

Ms. A. Wacher $20,000
Dr. B. Seymour
Dr. H. Huang
UBC, Mathematics
Vortek Industries Ltd.
Vancouver

Ms. B. Wicks $20,000
Dr. D. Randall
UBC, Zoology
Moore-Clark
Vancouver

Mr. X. Zhang $20,000
Dr. J. Saddler
UBC, Wood Science
Howe Sound Pulp and Paper
Port Mellon

Total (37 projects) ***$706,500***

Renewal Awards

Ms. E. Anderson $5,000
Dr. J. Owens
UVic, Biology
Western Forest Products
Jordon River
MacMillan Bloedel Ltd.
Nanaimo

Ms. J. Audet $20,000
Dr. J. Piret
Dr. C. Eaves
UBC, Biotechnology Lab and Chemical and Bio-Resource Engineering
StemCell Technologies Inc.
Vancouver

Ms. K. Baleshta $20,000
Dr. R. Guy
UBC, Forest Sciences
Adams Lake Lumber Division
Chase

Ms. J. Bennett $5,900
Dr. C. Prescott
UBC, Forest Sciences
Western Forest Products Ltd.
Saanichton

Mr. M. Bianchin $20,000
Dr. R. Beckie
UBC, Earth and Ocean Sciences
Golder Associates Ltd.
Burnaby

Ms. K. Bleiker $20,000
Dr. S. Lindgren
UNBC, College of Science and Management
Bugbusters Pest Management Inc.
Prince George
Zeidler Forest Industries Ltd.
McBride

Ms. L. Brewer $20,000
Dr. R. Newbury
SFU, Resource and Environmental Management
Cominco Ltd.
Trail

Ms. J. Burleigh $20,000
Dr. J. Borden
SFU, Biological Sciences
Bugbusters Pest Management Inc.
Prince George
Slocan Forest Products
Fort Nelson
Pacific Forestry Center
Victoria

GREAT: GRADUATE RESEARCH, ENGINEERING & TECHNOLOGY SCHOLARSHIPS

Mr. P. Chong $20,000
Dr. C. Leung
UBC, Electrical and Computer Engineering
DATUM Telegraphic Inc.
Vancouver

Ms. T. Cohen $20,000
Dr. A. Lewis
UBC, Earth and Ocean Sciences
Lorax Environmental Services Ltd.
Vancouver

Mr. M. Cranny $20,000
Dr. R. Wheate
UNBC, Geography
McGregor Model Forest Association
Prince George
Canadian Forest Products Ltd.
Fort St. James

Mr. S. Duckworth $7,700
Dr. R. Fannin
UBC, Civil Engineering
Nilex Inc.
Burnaby

Mr. C. Fleet $20,000
Dr. C. Breuil
UBC, Wood Science
Forintek Canada Corp.
Vancouver

Ms. D. Haag $19,240
Dr. C. Prescott
Dr. Tom Dickinson
UBC, Forest Sciences
Weyerhaeuser Canada Ltd.
Kamloops

Mr. I. Hafez $20,000
Dr. P. Cullis
UBC, Biochemistry and Molecular Biology
Inex Pharmaceuticals Corp.
Burnaby

Mr. I. Hers $20,000
Dr. L. Li
UBC, Civil Engineering
Golder Associates Ltd.
Burnaby

Mr. A. Ibrahim $20,000
Dr. P. Adebar
UBC, Civil Engineering
Read, Jones, Christoffersen
Vancouver

Jones, Kwong, Kishi
North Vancouver

Mr. D. Jez $20,000
Dr. M. Jackson
UBC, Electrical Engineering
Scientific-Atlanta Canada Inc.
Burnaby

Ms. L. Keller-Thomson $20,000
Dr. C. Opio
UNBC, Forestry Program
Canadian Forest Products Ltd.
Prince George

Mr. B. Liboiron $20,000
Dr. C. Orvig
UBC, Chemistry
Kinetek Pharmaceuticals, Inc.
Vancouver

Ms. L. Lin $20,000
Dr. J. Jones
SFU, Engineering Science
Questor Industries Inc.
Burnaby

Ms. N. Mattheus $20,000
Dr. S. Lee
SFU, Biological Sciences
Pacific Biotechnologies Inc.
Victoria

Mr. C. McNair $20,000
Dr. G. Gries
Dr. Gary Judd
SFU, Biological Sciences
IPM Technologies (Canada) Inc.
Vancouver

Mr. J. Nairn $20,000
Dr. C. Chanway
UBC, Forest Sciences
Brinkman and Associates Reforestation Ltd.
New Westminster

Mr. T. Newbery $20,000
Dr. K. Lewis
UNBC, Forestry
Norcan Consulting Ltd.
Prince George
Canadian Forest Products Ltd.
Prince George
Carrier Lumber Ltd.
Prince George

Mr. T. Ramsfield $20,000
Dr. B. Van der Kamp
UBC, Forest Sciences
MycoLogic Inc.
Victoria

Mr. S. Raney $8,333
Dr. M. Hope
Dr. Neil Kitson
UBC, Medicine
Inex Pharmaceuticals Corp.
Burnaby

Mr. J. Robinson $20,000
Dr. J. Saddler
UBC, Wood Science
(S&T)² Consultants Inc.
Delta

Mr. M. Sarunic $20,000
Dr. G. Chapman
SFU, Engineering Science
CREO Products Inc.
Burnaby

Ms. D. Saxon $20,000
Dr. M. Bally
UBC, Pathology
Inex Pharmaceuticals Corp.
Burnaby

Ms. N. Schmitz $20,000
Dr. A. Kermode
SFU, Biological Sciences
Western Forest Products Ltd.
Saanichton
Tree Seed Centre
Surrey
Western Forest Products
Vancouver
TimberWest Forest Ltd.
Vancouver
Canadian Forest Products Ltd.
Sechelt

Mr. G. Siegmund $5,000
Dr. D. Sanderson
UBC, Human Kinetics
MacInnis Engineering Associates
Richmond

Mr. C. Smith $20,000
Dr. B. Koop
UVic, Biology
SeaStar Biotech Inc.
Victoria

GREAT: Graduate Research, Engineering & Technology Scholarships

Ms. B. Walker $20,000
Dr. W. Jefferies
UBC, Biotechnology
Synapse Technologies Inc.
Vancouver

Ms. J. Watson $20,000
Dr. A. Bennet
SFU, Chemistry
De Novo Enzyme Corp.
Burnaby

Mr. A. Weber $5,900
Dr. J. Kimmins
UBC, Forest Sciences
Western Forest Products Ltd.
Saanichton

Mr. C. Wong $20,000
Dr. J. Matsubara
Dr. M. Potter
UBC, Ophthalmology
NeuroVir, Inc.
Vancouver

Ms. F. Wong $9,950
Dr. M. Bally
UBC, Pathology & Laboratory Medicine
Inex Pharmaceuticals Corp.
Burnaby

Ms. J. Yanick $20,000
Dr. D. Heath
UNBC, Biology
Yellow Island Aquaculture Ltd.
Campbell River

Mr. Y. Yu $20,000
Dr. K. Gupta
SFU, Engineering
International Submarine Engineering
Port Coquitlam

Mr. M. Zenaitis $20,000
Dr. S. Duff
UBC, Chemical & Bio-Resource Engineering
West Fraser Timber Co. Ltd.
Vancouver

Mr. J. Zhou $5,000
Dr. D. Mavinic
UBC, Civil Engineering
Dayton & Knight Ltd.
West Vancouver

Total (42 projects) ***$732,023***

William Armstrong Award

Mr. T. Newbery $2,000

Erich Vogt Award

Mr. M. Adamcyk $2,000

Total (79 projects) ***$1,442,523***

IBM Canada Limited Pacific Development Centre Scholarships

Ms. N. Benes $10,000
UBC, Science

Mr. W. Choi $10,000
UVic, Engineering

Mr. C. Deugau $10,000
Malaspina University College, Computing Science

Mr. R. Haymond $10,000
UBC, Applied Science

Ms. D. Liu $10,000
UBC, Computer Science

Mr. C. Mearns $10,000
BCIT, Computing

Mr. G. Peters $10,000
SFU, Computer Science

Ms. K. Tee $10,000
UBC, Science

Ms. C. Wall $10,000
UBC, Applied Science

Mr.E. Wiens $10,000
UBC, Applied Science

Total (10 projects) ***$100,000***

BC Science & Technology Infrastructure Program

Dr. J. Borneman $17,333
University of Victoria
Victoria
Advanced Materials Laboratory

Dr. R. Chapman $7,000
University of Victoria
Victoria
Acoustic Sea Bed Classification Centre

Dr. N. Djilali $10,000
University of Victoria
Victoria
SENSYS Networks of Centres of Excellence

Dr. B. Funt $20,000
Simon Fraser University
Burnaby
CFI Proposal Development

Dr. J. Grace $15,150
University of British Columbia
Vancouver
Centre for Clean Energy

Dr. S. Grundy $14,250
Royal Roads University
Victoria
Integration of Long-Term Atmospheric Monitoring and Ecological Indicators in Assessing the Effects of Global Climate Change and Pollutants on Human and Ecosystem Health

Dr. I. Hartley $19,500
Forintek Canada Corp.
Vancouver
Industrial Computerized Tomography Laboratory

Dr. D. Hildebrand $11,500
BCIT
Burnaby
The LEARN (Legal Examination and Analytical Research Network) Laboratory

Dr. J. Hogg $20,000
St. Paul's Hospital
Vancouver
Development of CFI Applications from St. Paul's Hospital

Dr. S. Innis $18,000
University of British Columbia
Vancouver
Infrastructure for Center for Nutrition-Gene Research

Dr. B. Kay $5,850
University of Victoria
Victoria
University-Industry Network for Salmonella-based Infectious Disease and Cancer Control (UNSICC)

Dr. P. Lansdorp $96,112
BC Cancer Research Centre
Vancouver
DeltaVision Optical Sectioning Microscope Model 243

Dr. D. Levin $18,000
University of Victoria
Victoria
Advanced Facility for Anaerobic and Aerobic Fermentation

Dr. G. McLean $11,100
University of Victoria
Victoria
Fuel Cell Research Laboratory Infrastructure

Dr. W. Mohn $6,000
University of British Columbia
Vancouver
Grants Facilitator for proposals to NSERC and CFI

Dr. J. Neary $86,800
Malaspina University College
Nanaimo
Applied Exercise Science Laboratory for Health and Disease

Dr. R. W. Olafson $3,866
University of Victoria
Victoria
Proteomics Facility - University of Victoria Protein Chemistry Centre

Dr. T. Pitcher $20,000
University of British Columbia
Vancouver
Development of New Facility for UBC Fisheries Center

Dr. R. Reid $20,000
University of British Columbia
Vancouver
CFI Application for Infrastructure for the centre for Pharmacogenetic Studies in Women and Children

Dr. J. Robinson $20,000
University of British Columbia
Vancouver
Sustainable Development Research Institute - research proposals to CFI, NCE, NSERC and MRC

Dr. I. Samarasekera $11,887
UBC Faculty of Applied Science
Vancouver
Engineering of Processes and Materials in the Wake of Kyoto

Dr. J. Schrader $20,000
University of British Columbia
Vancouver
Post Genomics Facility

Dr. I. Sharf $7,200
University of Victoria
Vancouver
Experimental Laboratory for Instrument Development in Astrophysics

Dr. H. Siden $16,429
Children's and Women's Health Centre of BC
Vancouver
Telehealth Implementation Model Project

Dr. R. Sobie $20,000
University of Victoria
Victoria
High Performance Computer File Server for University of Victoria

Dr. C. Ventura $9,100
University of British Columbia
Vancouver
Earthquake Engineering Research Facility

Dr. S. Vuong $20,000
University of British columbia
Vancouver
Global Information Systems and Software Technology (GISST)

Dr. L. Whitehead $19,125
University of British Columbia
Vancouver
Architectural Pricing Study to Support CFI proposal for a New Optics Laboratory

Total (28 projects) ***$564,202***

BC STIP

Dr. Ruediger Birenheide $33,256
Nanaimo
Culture of Juvenile Green Sea Urchins in a First Nations Community in British Columbia

Mr. Michael Callow $6,100
West Coast Green Urchin Association
North Vancouver
Experimental Out-Planting of Green Urchins

Ms. Jennifer Carpenter $20,000
Heiltsuk Cultural Education Centre
Waglisla
Heiltsuk Traditional Fish Trap Study

Ms. Rene Carradice $30,000
Chilliwack Fish and Game Protective Association
Sardis
Vedder/Chilliwack River Steelhead Telemetry Project 1999-2000

Mr. Stephen Cross $30,000
Aquametrix Research Ltd.
Sidney
Shellfish Aquaculture Carrying Capacity: Lemmens Inlet Test Study

Mr. Andrew Day $16,831
WCVI/Nuu-chah-nulth Regional Aquatic Management Society
Ucluelet
New Approaches to New Fisheries: Management structures, allocation regimes, and stock assessment techniques for new and underutilized species (with a case study of the Pacific sardine fishery).

Ms. Loretta Eustache $9,642
Spaliumcheen Indian Band
Enderby
Bessette Creek Coho Enumeration Fence

Mr. Don Ignace $3,837
Skeetchestn Indian Band
Savona
Deadman River Electronic Enumeration Fence Analysis and Training

Mr. George Kaliszewski $12,368
Bonaparte Indian Band
Cache Creek
Bonaparte River Fishway Coho Enumeration Project

Mr. Scott MacDonald $20,000
Pacific Sun EcoLogic Co. Ltd.
Ucluelet
West Coast Fish Mapping Project

Dr. John Nelson $44,800
SeaStar Biotech Inc.
Victoria
Management and conservation of sea cucumber stocks using DNA technology

Ms. Josie Osborne $20,000
Nuu-chah-nulth Tribal Council
Ucluelet
Kennedy Lake Expanded Sockeye Incubation Study

Dr. Barbara Shaw $5,585
Ocean Ecology
Prince Rupert
Northcoast Plankton Identification and Monitoring Program

Dr. Mark Shrimpton $29,515
University of Northern British Columbia, Biology Program
Prince George
Determination of the effective population size for four stocks of upper Fraser River chinook salmon

Total (15 projects) ***$281,934***

FISHERIES RENEWAL BC

98/99 RESEARCH PROGRAM YEAR 2 FUNDING

Extension

Ms. C. Hollsted
Southern Interior Extension and Research Society
Kamloops
$799,985
Southern Interior Forest Extension and Research Partnership

Land Use Planning

Mr. R. Davis
Interior Reforestation Co. Ltd.
Cranbrook
$100,000
ATLAS/SIMFOR Project Phase 3

NTFP Interim Review Team

Ms. L. Vaughn
Yun Ka Whu'Ten Holdings Ltd.
Anahim Lake
$103,042
Study of Pine Mushroom Ecology and Management Strategies in the Anahim Lake Area

Silvicultural Practices

Mr. R. Publicover
Slocan Forest Products Limited
Fort Nelson
$338,650
Boreal Mixedwood Management Applied Research, Development and Extension Project

Total 1998/98 Year 2: $1,341,676

97/98 RESEARCH PROGRAM YEAR 3 FUNDING

Communities

Dr. R. Pfister
University of Northern British Columbia
Prince George
$55,670
Community Tourism Development Planning

Dr. J. Pierce
Simon Fraser University
Burnaby
$75,431
Promoting CED for Forest-Based Communities

Extension

Ms. P. Barnes
Northwest Community College
Terrace
$283,950
A FRBC Skeena-Bulkley Natural Resource Information Access Project

Ms. E. Hamilton
BC Ministry of Forests
Victoria
$270,036
Forest Biodiversity Extension: Publication Development and Production

Dr. G. Scudder
University of British Columbia
Vancouver
$55,492
The Aphids of British Columbia

Forest Ecosystems

Mr. A. Banner
BC Ministry of Forests
Smithers
$264,007
Pattern, Process and Productivity in Hypermaritime Forests of Coastal British Columbia - The HyP3 Project

Dr. M. Jones
Okanagan University College
Kelowna
$40,394
The Effect of Air-Vent Blocks and Microbial Inoculants on Conifer Root Systems Before and After Outplanting

Dr. P. Jordan
BC Ministry of Forests
Nelson
$50,000
Landslide and Terrain Attribute Study

Dr. H. Kimmins
University of British Columbia
Vancouver
$2,000
Assessing the Controls on Soil-N Cycling Rates and Microbial Dynamics in CWH Ecosystems to Develop a Computer-Based Soil Model Applicable to Forest Management

Dr. K. Lertzman
Simon Fraser University
Burnaby
$43,811
Variability of Natural Disturbances in Interior Douglas-Fir Zone Landscapes: The Role of Forest Structure Topography

Dr. D. McClung
University of British Columbia
Vancouver
$50,260
Snow Avalanche Activity and Decision Support in Forested and Harvested Terrain

Growth and Yield

Mr. J. Goudie
BC Ministry of Forests
Victoria
$66,061
Modelling the Impact of Silvicultural Activities on the Wood Characteristics of Western Hemlock

FOREST RENEWAL BC

Inventory Methodology

Dr. K. Lertzman
Simon Fraser University
Burnaby
$10,088
Refinement, Redesign and Reengineering of a Hemispherical Image Analysis System for Use in British Columbia Forests

Mr. Eric Parkinson
BC Ministry of Fisheries
Vancouver
$125,750
Defining Evolutionary Significant Units in Rainbow Trout: An Integrated Approach in Intraspecific Taxonomy

Pest Management

Dr. J. Borden
Simon Fraser University
Burnaby
$147,390
Chemical Ecology and Management of Wood-Boring Beetles

Dr. J. Borden
Simon Fraser University
Burnaby
$87,394
Impact Assessment of the Western Conifer Seed Bug, Leptoglossus occidentalis

Restoration Practices

Dr. C. Prescott
University of British Columbia
Vancouver
$78,565
Rehabilitation of Forest Roads and Landings With Wood Waste

Mr. J. Senyk
Canadian Forest Service
Victoria
$8,400
Effects of Forest Harvesting and Site Restoration Practices on Soil Productivity in Montane Alternative Silviculture System Trials (MASS)

Dr. G. Xiao
University of British Columbia
Vancouver
$100,538
Suitability of Biological Inoculants for Conifer-Seedlings on Reclamation and Standard Reforestation Sites

Sensitive Species

Dr. P. Axelrood
BC Research Incorporated
Vancouver
$272,023
Molecular Characterization of Microbial Biodiversity of Forest Soils, Phase Two

Dr. J. Richardson
University of British Columbia
Vancouver
$115,452
Influence of Reserve Strip Width on Riparian and Stream Ecosystems: Invertebrate Responses to Management

Mr. S. Sharpe
BC Ministry of Environment, Lands and Parks
Smithers
$213,978
Forest Ecology, Forest Renewal and Introduced Species in Haida Gwaii (Queen Charlotte Islands)

Silvicultural Practices

Dr. D. Coxson
University of Northern British Columbia
Prince George
$140,866
Forest Canopy Processes and Partial-Cutting Silvicultural Systems in Northern Wet-Belt Forests

Ms. A. van Niejenhuis
Western Forest Products Limited
Saanichton
$20,150
Timber Productivity Enhancement of Suquash Main CWHvm1 Through Improved Drainage

Mr. R. Whitehead
Canadian Forest Service
Victoria
$108,150
Partial Cutting and Fertilization of Lodgepole Pine in the East Kootenays to Improve Stand Health, Increase Landscape Diversity and Promote Integrated Resource Management

Mr. R. Winter
BC Ministry of Forests
Victoria
$72,513
Incremental Silviculture of Lodgepole Pine: Integration of Stand Productivity and Non-Timber Values

Tree Genetics

Dr. D. Ellis
BC Research Incorporated
Vancouver
$155,900
Lignin Modification in Trees: Production of Angiosperm-Type Lignin in Gymnosperms

Dr. G. Namkoong
University of British Columbia
Vancouver
$74,277
Managing Forest Tree Genetic Variance for Climatic Change - Field and DNA Marker Based Testing of a Novel System

Value-Added

Dr. R. Foschi
University of British Columbia
Vancouver
$366,590
Reliability and Design of Innovative Wood Structures Under Earthquake and Extreme Wind Conditions

Dr. M. Salcudean
University of British Columbia
Vancouver
$122,380
Fiber Fluid Interaction in Pulp and Paper Processes

Workforce

Dr. R. Gifford
University of Victoria
Victoria
$81,731
Monitoring and Improving the Adjustment of Displaced Forest Workers

Ms. C. Livingstone
Capilano College
North Vancouver
$48,061
Employment Training in the Forest Industry: A Quantitative Analysis

Total 1997/98 Year 3: $3,607,306.25

96/97 RESEARCH PROGRAM YEAR 4 FUNDING

Biodiversity

Dr. G. Allen
University of Victoria
Victoria
$41,525
Ecological, Genetic and Taxonomic Studies of Rare Plant Species

Dr. A. Arsenault
BC Ministry of Forests
Kamloops
$73,424
Pattern of Bryophyte and Lichen Diversity in Interior and Coastal Cedar-Hemlock Forests of British Columbia

Dr. S. Berch
University of British Columbia
Victoria
$43,165
Impact of Single Conifer Species Plantations on Soil Biodiversity and Processes

Dr. M. Bothwell
Environment Canada
Nanaimo
$100,000
Effects of Ultraviolet Radiation on Stream Ecosystems and its Links to Forestry Activities

Dr. F. Bunnell
University of British Columbia
Vancouver
$103,512
Persistence of Forest-Dependent Vertebrates in Managed Forests

Dr. A. Burger
University of Victoria
Victoria
$73,750
Habitat Requirements of Marbled Murrelets and the Effects of Forest Harvest Practices on SW Vancouver Island

Dr. F. Cooke
Simon Fraser University
Burnaby
$212,375
Effects of Forest Management on Biodiversity of Riparian Ecosystems in Interior Forests of the Cariboo-Chilcotin

Dr. F. Cooke
Simon Fraser University
Burnaby
$190,000
Nesting Habits, Abundance and Ecology of Marbled Murrelets on the BC Coast

Dr. D. Durall
Okanagan University College
Kelowna
$50,000
Opax Mountain Silvicultural Systems Project: The Long-Term Effect of Small Cut-Block on Ectomycorrhizal Diversity at Opax Mountain

Dr. B. Heise
University College of the Cariboo
Kamloops
$36,342
Sicamous Creek Silvicultural Systems Project: Effects of Timber Harvesting and Road Construction on Stream Invertebrates in the Sicamous Creek Watershed

Dr. S. Hinch
University of British Columbia
Vancouver
$67,000
Physiological and Behavioural Responses of Resident Stream Salmonids to Riparian Logging Practices

Dr. M. Jones
Okanagan University College
Kelowna
$50,000
Sicamous Creek Silvicultural Systems Project: The Effect of Cutblock Size on Fungal Diversity at Sicamous Creek

Dr. J. Macdonald
Department of Fisheries and Oceans
West Vancouver
$245,000
Takla Fish/Forestry Interaction Study: Department of Fisheries and Oceans Freshwater Habitat Science Component Sockeye Salmon Spawning, Incubation and Rearing Habitat Evaluation

Ms. M. Machmer
Pandion Ecological Research Limited
Nelson
$40,000
East Kootenay Trench Restoration Program: Ecological Role of Fire for Cavity-Nesting Birds

Dr. M. Valin
Royal Roads University
Victoria
$64,000
Impact of Clearcutting on Soil Nematodes

Dr. B. McLellan
BC Ministry of Forests
Revelstoke
$150,000
Integrating Requirements of Grizzly Bears With Forest Practices in Managed Landscapes

Dr. B. McLellan
BC Ministry of Forests
Revelstoke
$71,820
Integrating Mountain Caribou Requirements and Forest Management in Wet Belt Ecosystems

Dr. D. Morgan
BC Ministry of Forests
Victoria
$60,000
Landscape Analysis of Caribou Habitat

Dr. W. Neill
University of British Columbia
Vancouver
$96,429
Persistence of Threatened Pacific Giant Salamander Populations Under Forest Harvesting in the Chilliwack River Valley

Mr. E. Parkinson
BC Ministry of Fisheries
Vancouver
$86,438
Habitat Requirements of Species at Risk

Dr. J. Richardson
University of British Columbia
Vancouver
$208,539
Ecology of Tailed Frogs and the Effects of Forest Practices

Dr. G. Scudder
University of British Columbia
Vancouver
$47,514
Geographic and Ecosystem Distribution of Sensitive Invertebrate Species in British Columbia

Dr. D. Shackleton
University of British Columbia
Vancouver
$39,855
Northwest Bay Cougar Project

Ms. S. Shirley
University of British Columbia
Vancouver
$18,900
Effects of Riparian Buffer Strips on Avian Communities in Coastal Forests

Dr. S. Simard
BC Ministry of Forests
Kamloops
$6,000
Effects of Tree Species Composition on Ectomycorrhizal Sporocarp Diversity in Late Seral ICH Forests: Paper Birch, Douglas-Fir, and Admixtures

Mr. C. Steeger
Pandion Ecological Research Limited
Nelson
$30,000
Nest Tree Dynamics in the ICH

Ms. S. Threinen
BC Conservation Foundation
Kamloops
$25,000
Sicamous Creek Silvicultural Systems Project: Effects of Alternative Silviculture Practices on Songbird Communities in Englemann Spruce - Subalpine Fir (ESSF) Forests

Extension

Mr. K. Day
University of British Columbia
Williams Lake
$10,000
An Extension Strategy for the UBC/Alex Fraser Research Forest

Ms. D. DeLong
BC Ministry of Forests
Nelson
$82,000
West Arm Demonstration Forest: Development and Coordination Proposal

Dr. M. Johannes
Northwest Ecosystem Institute
Lantzville
$100,000
Kennedy Watershed, Salmon Habitat and Salmon Atlas

Dr. J. Kimmins
University of British Columbia
Vancouver
$25,000
Computer-Based Educational, Extension and Gaming Tools By Which to Support the Objectives of FRBC

Dr. T. Maness
University of British Columbia
Vancouver
$101,853
Wood Products Quality Control Council of British Columbia

Mr. L. Smith
BC Ministry of Forests
Nelson
$7,000
Directory of Forest Research Test Sites in the Nelson Forest Region

Forest Ecosystems and Landscape Ecology

Mr. P. Beaudry
P. Beaudry and Associates Ltd.
Prince George
$51,638
Effects of Riparian Management Strategies on Streamflow, Suspended Sediment and Channel Morphology of Small "S4" and "S6" Type Streams

Mr. R. Benton
Canadian Forest Service
Victoria
$11,000
MASS: Impacts of Montane Alternative Silvicultural Practices on Within Stand and Soil Microclimate/Microenvironment

Dr. S. Berch
BC Ministry of Forests
Victoria
$283,575
Long Term Soil Productivity

Dr. G. Bradfield
University of British Columbia
Vancouver
$25,000
Disturbance Impacts on Key Processes in High Elevation Forests: A Multiscale Approach

Dr. P. Burton
Symbios Research and Restoration
Smithers
$90,500
Development and Testing of Native Grasses and Legumes for Seeding in the BC Interior

FOREST RENEWAL BC

Dr. M. Carlson
BC Ministry of Forests
Vernon
$12,180
Propagation Techniques for Native Plant Species from Seed

Mr. A. Chapman
Chapman Geoscience
Kamloops
$20,600
Slope and Road Hydrology in Natural and Disturbed Watersheds - Clayquot Sound

Dr. M. Curran
BC Ministry of Forests
Nelson
$22,000
Partial Cutting Systems Research in the Interior Cedar-Hemlock Zone in Root Disease Infected Stands: Dead Wood Component

Dr. M. Curran
BC Ministry of Forests
Nelson
$45,000
Skidroad and Skid Train Rehabilitation Effects on Soil Properties and Resulting Forest Productivity

Mr. C. DeLong
BC Ministry of Forests
Nelson
$10,000
Investigation of the Role of Disturbance in the Maintenance of Upland Willow Communities

Dr. K. Egger
University of Northern British Columbia
Prince George
$125,000
Ecology, Diversity and Resilience of Rhizosphere Communities Adapted to Different Natural Disturbance Regimes

Mr. T. Giles
BC Ministry of Forests
Kamloops
$59,000
Upper Penticton Creek Watershed Experiment: Influences of Timber Harvesting and Road Construction on the Sediment Budgett

Mr. D. Gluns
BC Ministry of Forests
Nelson
$17,000
West Arm Demonstration Forest: Climate and Snow Monitoring

Dr. A. Gottesfeld
University of Northern British Columbia
Prince George
$8,000
Sediment Transport Processes and Channel Change in Logged and Unlogged Watersheds, Stuart-Takla Experimental Watersheds

Mr. M. Hansen
Rocky Mountain Trench Natural Resources Society
Kimberley
$30,000
East Kootenay Trench Restoration Program: East Kootenay Trench Restoration Treatments Monitoring

Dr. B. Heise
University College of the Cariboo
Kamloops
$28,912
Upper Penticton Creek Watershed Experiment: Effects of Road Construction and Timber Harvesting on Stream Invertebrates

Mr. D. Hogan
BC Ministry of Forests
Vancouver
$83,000
Stream Channels, Large Woody Debris and Biogeoclimatic Zones

Dr. G. Hope
BC Ministry of Forests
Kamloops
$20,000
Sicamous Creek Silvicultural Systems Project: Effects of Silvicultural Systems on Soil Productivity

Dr. G. Hope
BC Ministry of Forests
Kamloops
$21,668
Sicamous Creek Silvicultural Systems Project: Effects of Silvicultural Systems on Fine Root Biomass

Dr. G. Hope
BC Ministry of Forests
Kamloops
$5,000
Opax Mountain Silvicultural Systems Project: The Effects of Silvicultural Systems on Soil Productivity in the IDF Zone - Impacts on Soil Organic Matter and Soil Nitrogen

Dr. G. Hope
BC Ministry of Forests
Kamloops
$10,000
The Role of Hardwoods in Sustaining Site Productivity in Interior Cedar Hemlock Stands

Dr. N. Johnston
BC Ministry of Fisheries
Vancouver
$176,534
Synoptic Surveys and the Effects of Riparian Management Regulations Along S5 and S6 Streams on Downstream Fish Habitat

Dr. P. Jordan
BC Ministry of Forests
Nelson
$40,000
West Arm Demonstration Forest: Sediment Budget

Dr. P. Jordan
BC Ministry of Forests
Nelson
$21,000
Sediment Budgets of Community Watersheds in the Nelson Forest Region

Dr. K. Lertzman
Simon Fraser University
Burnaby
$90,000
Multi-Scale Analyses of Forest Landscape Patterns and Dynamics

Dr. K. Lertzman
Simon Fraser University
Burnaby
$25,901
Long-Term Fire Histories in a Coastal Temperate Rainforest

Mr. D. Lloyd
BC Ministry of Forests
Kamloops
$165,000
Sicamous Creek Silvicultural Systems Project: Spatial and Temporal Response of Vegetation to Silvicultural Practices in the ESSF

Dr. R. Parish
BC Ministry of Forests
Victoria
$60,000
Impact of Changing Disturbance Regimes and Patch Size on Stand Structure of Interior and Coastal High-Elevation Forests

Dr. C. Prescott
University of British Columbia
Vancouver
$1,200
Sicamous Creek Silvicultural Systems Project: Coarse Woody Debris Dynamics in Wet and Dry ESSF Forests

Dr. C. Prescott
University of British Columbia
Vancouver
$7,885
Partial Cutting Systems Research in the Interior Cedar-Hemlock Zone in Root Disease Infected Stands: Litter Input and Decomposition Component

Dr. J. Richardson
University of British Columbia
Vancouver
$120,507
Stream Benthos Responses to Riparian Management

Dr. D. Russell
University of British Columbia
Vancouver
$78,000
Hydraulic Design of Culverts and Bridges for Forest Roads

Dr. P. Sanborn
BC Ministry of Forests
Prince George
$3,000
Biogeochemistry of Sitka Alder - Lodgepole Pine Ecosystems in the Central Interior of British Columbia

Dr. P. Sanborn
BC Ministry of Forests
Prince George
$6,000
Soil Rehabilitation Research and Demonstration in the Aleza Lake Demonstration Forest

Dr. M. Schmidt
Simon Fraser University
Burnaby
$36,000
The Impact of Vine Maple on Forest Soils, Nutrient Cycling and Growth of Conifers in Southwestern BC Forests

Dr. S. Simard
BC Ministry of Forests
Kamloops
$10,000
Effects of Artificial and Natural Nitrogen and Phosphorus Sources on Sustaining Growth of Paper Birch and Black Cottonwood on Forest, Riparian, and Agricultural Lands in the ICH Zone of Southern BC

Dr. D. Spittlehouse
BC Ministry of Forests
Victoria
$25,463
Sicamous Creek Silvicultural Systems Project: Effects of Clearcut Size on Microclimate

Dr. D. Spittlehouse
BC Ministry of Forests
Victoria
$45,159
Upper Penticton Creek Watershed Experiment: Effect of Forest Canopies on Energy Available for Snow Melt and Summer Evapotranspiration

Dr. P. Tschaplinski
BC Ministry of Forests
Victoria
$185,399
Carnation Creek - An Experiment Toward Long-Term Integrated Resource Management

Dr. P. Tschaplinski
BC Ministry of Forests
Victoria
$51,269
Stuart-Takla Fisheries Forest Interaction Project: The Effects of Forest Harvesting on Stream Channel Geomorphology and Adult Sockeye Salmon Abundance, Distribution, and Habitat Quality

Ms. R. Winkler
BC Ministry of Forests
Kamloops
$50,000
Upper Penticton Creek Watershed Experiment: The Effects of Forest Harvesting on Water Quantity and Quality in Small Interior Watersheds

Forest Management Decision Support

Dr. T. Black
University of British Columbia
Vancouver
$82,500
Carbon Dioxide and Water Vapour Exchange Above a Representative Coastal BC Forest

Mr. D. Morgan
BC Ministry of Forests
Victoria
$50,000
Automated Mapping of Landscape Patterns for Landscape Planning

Dr. A. Roberts
Simon Fraser University
Burnaby
$65,000
Airborne Remote Sensing of Suspended Sediment in Streams

Dr. A. Roberts
Simon Fraser University
Burnaby
$36,000
Estimating Forest Patterns and Structures from Airborne Digital Remote Sensing Imagery

Mr. David Toews
BC Ministry of Forests
Nelson
$71,450
West Arm Demonstration Forest: A Case Study Evaluation of the Interior Watershed Assessment Procedure (IWAP) Level 1 Analysis Guidebook of the Forest Practices Code

Forest Operations & Decision Support

Mr. A. Barber
Canadian Forest Products Limited
Woss
$9,000
Regeneration Performance on Rehabilitated Roads

Mr. W. Beese
Weyerhaeuser
Nanaimo
$10,000
MASS: Project Coordination for the Montane Alternative Silvicultural Systems Study

Mr. W. Beese
Weyerhaeuser
Nanaimo
$40,000
MASS: Natural Regeneration and Vegetation Dynamics at the Montane Alternative Silvicultural Systems Site

Dr. W. Binder
BC Ministry of Forests
Victoria
$14,753
Risk Assessment for Ultraviolet-B Radiation Damage to Economically Important Tree Species in British Columbia

Dr. K. Brown
BC Ministry of Forests
Victoria
$75,600
Mineral Nutrition of Hybrid Poplar

Dr. K. Brown
BC Ministry of Forests
Victoria
$45,000
Mineral Nutrient Deficiencies in Red Alder Stands

Dr. P. Comeau
BC Ministry of Forests
Victoria
$285,000
Effects of Coastal Hardwoods on Mixed Stand Development and Nutrient Availability (EP1121

Dr. P. Comeau
BC Ministry of Forests
Victoria
$179,550
Evaluation of Vegetation Management Treatment Options

Mr. T. Conlin
BC Ministry of Forests
Victoria
$10,500
Asexual Propagation of Trembling Aspen (Populus tremuloides)

Mr. D. Coopersmith
BC Ministry of Forests
Prince George
$65,000
The Autoecology of Young Broadleaf and Mixedwood Stands in Northern British Columbia: Silviculture Options for Stand Management

Mr. P. Courtin
BC Ministry of Forests
Nanaimo
$5,000
The Use of Red Alder to Enhance Sitka Spruce Growth in the Queen Charlotte Islands (EP 1178)

Mr. C. DeLong
BC Ministry of Forests
Prince George
$15,000
Investigations of Planting White Spruce Under Trembling Aspen

Ms. D. DeLong
BC Ministry of Forests
Nelson
$15,000
Operational Case Studies and Extension Activities

Ms. D. DeLong
BC Ministry of Forests
Nelson
$20,000
Establishment and Development of Mixed Species Stands Across A Range of Micro-Environments in the ICHmw2 - EP 1191

Ms. M. Donnelly
Louisiana-Pacific Canada Limited
Swan River
$15,000
The Effects of Timber Harvesting, Agronomic Seeding and Cattle Grazing on Aspen and Forage Production in the South Peace Region (E.P. 1075/ The "Holy Cow" Project)

Ms. M. Douglas
Foresol Consulting Limited
Black Creek
$6,000
Impacts of the Hoe-Forwarding Harvesting System on Site Productivity

Mr. B. Dunsworth
Weyerhaeuser
Nanaimo
$15,960
MASS: Growth Limitations of Regenerating Montane Conifers in Silvicultural Systems in Coastal Montane Forests

Mr. M. Jull
University of Northern British Columbia
Prince George
$345,500
Northern Rockies Interior Cedar-Hemlock and ESSF Silvicultural Systems Research Project

Mr. M. Jull
University of Northern British Columbia
Prince George
$50,000
Wind-Resistant Silvicultural Systems by Design: Identification of Wind Risk Factors and Mitigation Measures Through Wind and Windthrow Research in Central and Northern Interior Partial Cuts

Mr. R. Kabzems
BC Ministry of Forests
Fort St. John
$35,000
Regenerating Boreal Mixed Woods

Dr. J. Kimmins
University of British Columbia
Vancouver
$27,000
Assessment of the Sustainability of Forest Ecosystems and Evaluation

of Indicators of Sustainable Forest Management

Mr. R. Koppenaal
Silva West Consulting
Victoria
$35,000
MASS: Release of Advance Regeneration Under Varying Overstory Retention in a Coastal Montane Forest

Dr. A. Mitchell
Canadian Forest Service
Victoria
$2,500
MASS: Project Coordination for the CFS Component of Sustainable Silvicultural Systems for Old-Growth Montane Forests of Vancouver Island

Dr. A. Mitchell
Canadian Forest Service
Victoria
$20,885
MASS: Indicators of Growth Limitations of Regenerating Montane Conifers Under Alternative Silvicultural Systems

Dr. A. Mitchell
Canadian Forest Service
Victoria
$21,177
MASS: Indicators of Growth Limitations of Regenerating Montane Conifers Under Alternative Silvicultural Systems

Ms. Teresa Newsome
BC Ministry of Forests
Williams Lake
$44,000
Hardwood and Mixedwood Research in the Cariboo Forest Region

Dr. M. Novak
University of British Columbia
Vancouver
$70,000
Sicamous Creek: Wind Tunnel and Field Studies of Wind Regimes and Windthrow in Forests

Dr. C. Prescott
University of British Columbia
$7,875
Influence of Species Mixtures on Litter Decomposition in Forests of British Columbia

Dr. C. Prescott
University of British Columbia
Vancouver
$167,035
Fertilization and Vegetation Control for Improving Conifer Regeneration in Coastal British Columbia

Mr. C. Rowan
BC Ministry of Forests
Nanaimo
$25,000
Windthrow Management Operational Trials for Cutblock Edge Treatments

Dr. S. Simard
BC Ministry of Forests
Kamloops
$70,000
Paper Birch Stand Management Studies in the ICH Zone in the Southern Interior of British Columbia: Birch Thinning Trials

Dr. S. Simard
BC Ministry of Forests
Kamloops
$40,000
Regeneration of Paper Birch/Conifer Mixtures in the ICH Zone of the Southern Interior of British Columbia

Dr. S. Simard
BC Ministry of Forests
Kamloops
$5,000
Comparison of Site Preparation Treatments on a Steep, Dry, Grassy Site in the IDF Zone in the Lillie Forest District

Dr. S. Simard
BC Ministry of Forests
Kamloops
$25,000
Crop Tree Response to Brushing at Various Radii in the Mixed Broadleaved Shrub Complex

Mr. K. Thomas
BC Ministry of Forests
Victoria
$92,500
Vegetation Management Options for Establishment of Hybrid Poplar Plantations and Their Effect on Nutrient Cycling

Dr. M. Vaartnou
M. Vaartnou & Associates
Richmond
$80,000
Establishment of a Native Seed Industry for the West Coast of Vancouver Island

Dr. A. Vyse
BC Ministry of Forests
Kamloops
$150,000
Sicamous Creek Silvicultural Systems Project: Project Coordination, Facilities, Support Research and Overall Extension

Dr. Vyse
BC Ministry of Forests
Kamloops
$80,000
Opax Mountain Silvicultural Systems Project: Project Overview and Coordination

Mr. A. Vyse
BC Ministry of Forests
Kamloops
$5,000
Sicamous Creek and Opax Mountain Silvicultural Systems Projects: Advance Regeneration in ESSF and IDF

Dr. J. Wang
BC Ministry of Forests
Prince George
$200,000
Management of Paper Birch and Birch Conifer Mixtures in Central BC

Ms. M. Waterhouse
BC Ministry of Forests
Williams Lake
$8,500
Silvicultural Systems Research in the Cariboo Forest Region (Uniform Shelterwood Systems for Even-Aged Douglas-Fir/Lodgepole Pine Stands in the SBSdw1 Subzone)

Ms. M. Waterhouse
BC Ministry of Forests
Williams Lake
$56,500
Silvicultural Systems Research in the Cariboo Forest Region (Group Selection Systems to Maintain Caribou Habitat in High Elevation Forests (ESSFwc3) in the Cariboo Forest Region)

Ms. M. Waterhouse
BC Ministry of Forests
Williams Lake
$46,500
Silvicultural Systems Research in the Cariboo Forest Region (Silvicultural Systems to Maintain Northern Caribou Habitat in Lodgepole Pine Forest in the in MSxv and SBPxc Subzones)

Ms. M. Waterhouse
BC Ministry of Forests
Williams Lake
$17,000
Silvicultural Systems Research in the Cariboo Forest Region (Alternative Silvicultural Systems for Douglas-Fir Stands on Heavy Snowfall Mule Deer Winter Range)

Growth & Yield

Mr. R. Brockley
BC Ministry of Forests
Vernon
$230,000
Interior Forest Nutrition Growth and Yield Experiments

Mr. P. Courtin
BC Ministry of Forests
Nanaimo
$15,000
Stand Tending Regimes for Red Alder Plantations (EP 1140.01)

Dr. L. de Montigny
BC Ministry of Forests
Victoria
$430,000
Coastal Stand Management Growth and Yield Experiments

Ms. D. DeLong
BC Ministry of Forests
Nelson
$16,000
Partial Cutting Systems Research in the Interior Cedar Hemlock Zone in Root Disease Infected Stands: Stand Response Component

Dr. W. Johnstone
BC Ministry of Forests
Vernon
$101,015
Interior Stand Management Growth and Yield Experiments

Mr. D. Meidinger
BC Ministry of Forests
Victoria
$60,000
Pilot to Develop Methodology for an Ecologically-Based Yield Analysis

Dr. K. Mitchell
BC Ministry of Forests
Victoria
$466,000
Development of Growth and Yield Decision Support Tools

Pest Management

Dr. J. Borden
Simon Fraser University
Burnaby
$75,000
Chemical Ecology and Management of Forest Insects

Dr. M. Curran
BC Ministry of Forests
Nelson
$115,000
Harvesting Season and Mechanical Rootrot Control Treatment Effects on Soil Properties and Resulting Forest Productivity

Ms. D. DeLong
BC Ministry of Forests
Nelson
$15,000
Harvesting Season and Mechanical Rootrot Control Treatment Effects on Soil Properties and Resulting Forest Productivity

Ms. M. Ketcheson
JMJ Holdings Ltd.
Nelson
$9,972
Wetask Lake Patch Cutting Trial (SX95102N)

Dr. L. Maclauchlan
BC Ministry of Forests
Kamloops
$20,000
Sicamous Creek Silvicultural Systems Project: Spatial and Temporal Analysis of Attack and Impact of Dryocoetes confusus (Swaine) in Natural and Management Subalpine Fir Forests

Dr. L. Maclauchlan
BC Ministry of Forests
Kamloops
$30,000
Opax Mountain Silvicultural Systems Project: Effect of Insects on Health of Trees and Stands

Dr. P. Monette
Arbutus Life Sciences
Sidney
$28,140
MASS: Seed and Seedling Diseases Affecting Natural Regeneration at the Montane Alternative Silvicultural Systems Site

Dr. B. van der Kamp
University of British Columbia
Vancouver
$25,000
Management of Armillaria Root Disease by Inducing Quiescence

Mr. T. Zimmerling
Applied Ecosystem Management
Terrace
$57,683
The Influence of Tree Density on Porcupine (Erethizon dorsatum) Movements, Mortality Rates and Feeding

Tree Genetics

Dr. S. Aitken
University of British Columbia
Vancouver
$10,360
Physiological Genetics of Coastal Douglas-Fir Genotypes Exhibiting High and Low Stability of Performance in Field Tests

Dr. R. Alfaro
Canadian Forest Service
Victoria $124,320
Development of a Field Bioassay for

Spruce Weevil Resistance in Sitka Spruce and Interior Spruce

Ms. P. Brown
Canadian Forest Products Limited
Sechelt
$2,000
Genetic Testing of Canadian Forest Products Ltd.'s High Elevation Douglas Fir Orchard

Dr. D. Cyr
BC Research Inc.
Vancouver
$204,680
Tree Improvement: Evaluation of Somatic Embryogenesis for Western White Pine (Pinus monticola)

Dr. Y. El-Kassaby
PRT Management Inc.
Victoria
$50,000
Molecular Assessment of Spruce Weevil Population

Dr. Y. El-Kassaby
PRT Management Inc.
Victoria
$30,000
MASS: Genetic Consequences of Alternative Silvicultural Systems for Conifer Species in Coastal Montane Forests

Dr. Y. El-Kassaby
PRT Management Inc.
Victoria
$70,000
Genetic Diversity in Minor BC Species

Dr. J. King
BC Ministry of Forests
Victoria
$162,358
Studies of Genetic and Environmental Variation of Wood Properties in Commercially Important BC Forest Trees

Dr. N. Livingston
University of Victoria
Victoria
$47,300
Improving Nitrogen Use Efficiency and Productivity of Western Hemlock

Dr. J. Manville
Canadian Forest Service
Victoria
$90,000
Elucidating a Resistance Mechanism in Spruce to the Terminal Weevil (Pissodes strobi Peck); Development of a Rapid Method for Identifying Weevil Resistant Spruce Trees

Dr. G. Namkoong
University of British Columbia
Vancouver
$36,015
Rapid Breeding for Tracheid Characters in Interior Spruce

Dr. G. Namkoong
University of British Columbia
Vancouver
$59,997
Utilization and Management of Red Alder Genetic Resources in British Columbia

Dr. G. Namkoong
University of British Columbia
Vancouver
$48,000
Genetic Effects on Fiber and Structure Wood Properties in Western Hemlock

Dr. K. Ritland
University of British Columbia
Vancouver
$42,000
Heritabilities in Natural Populations of Four BC Conifer Species

Mr. D. Simpson
BC Ministry of Forests
$11,996
Measurement and Analysis of Genetic Differences in Experimental Forest Tree (Paperbirch) Populations

Ms. R. Sturrock
Canadian Forest Service
Victoria
$99,750
Tree Improvement - Screening Coastal Douglas-Fir for Resistance to Phellinus weirii (Laminated Root Rot) and Assessment of Resistance Mechanisms

Ms. A. Van Niejenhuis
Western Forest Products Limited
Saanichton
$72,083
Field Clonal Testing of Yellow Cedar Clonal Hedge Material

Dr. J. Webber
BC Ministry of Forests
Victoria
$34,478
Determining Barriers to Seed Production in Abies spp

Mr. J. Woods
BC Ministry of Forests
Mesachie Lake
$221,739
Establishment of Forest Renewal BC - Funded Forest Tree Experimental Population

Mr. J. Woods
BC Ministry of Forests
Mesachie Lake
$15,992
Development of Improved Seed and Vegetative Propagule Delivery Mechanisms

Dr. A. Yanchuk
BC Ministry of Forests
Victoria
$65,990
Population and Molecular Genetic Studies

Dr. Y. Cheng
BC Ministry of Forests
Victoria
$212,000
Collection of New Germplasm for Gene Conservation and Genetic Testing

Value-Added

Mr. F. Fogarty
Independent
Roberts Creek
$36,000
Alternative Forest Products - Inventory and Management Strategies for the Sunshine Coast Forest District

TOTAL 1996/97 Year 4: $11,032,981

SPECIAL PROJECTS

BC FFN Network $5,000
BC Functional Food and Nutraceutical Network

BCISIT 1,000
Intellectual Property Protection Workshop

BC Health Research Foundation $1,000
Infrastructure Retreat Follow-Up

CPROST-SFU $1,000
Achievements in Innovation PECC

Vancouver Enterprise Forum $3,250
VEF 1999/2000 Season

UBC-Faculty of Science $3,000
Alternative Routes to Computing 2000

Committee of Forest Research Agencies $25,000
Moving Forward: The Use of Science in the BC Forest Resource Management Sector

Aquaculture Assoc. of Canada, $1,000
16th Annual Meeting of the Aquaculture Assoc. of Canada

Shuneymuxw First Nation/MISTIC $2,000
The Growing Economy of Mushrooms Conference

L. Byrne,
UBC, Dept. of Education $5,000
Attitude Formation Research-Literature Review

D. Stirling,
SFU, Business Admin/Marketing $5,000
Attitude Formation Marketing Research

Vancouver Board of Trade $2,500
Public Policy Forum on Post-Secondary Education

BC Advanced Systems Institute $3,000
Exchange 2000

Science Fair Foundation of BC $7,200
Regional Science Fair Prizes

BC Biotechnology Alliance $25,000
Health Sector Report Card

Canadian Genetic Disease Network $5,000
Human Genome Meeting 2000

Vancouver Board of Trade $5,000
"Leaders of Tomorrow" Student Mentoring

BC Technology Industries Association $5,000
Women in Technology Group

Canadian Environment Industry Association - BC Chapter $2,000
BC-China Environment Technology Exchange Luncheon

Total (19 projects) ***$106,950***

REGIONAL INITIATIVES INNOVATION FUND

Innovation Resource Centre in Prince George $2,538
Open House event designed to act as a catalyst for the recently established eCommerce Industry Association.

Science Council of BC - Okanagan $500
Youth Entrepreneur Awards 2000 program – Entrepreneurship and Technology Award

Interior Science Innovation Council in Kamloops $5,000
BIZTECH 2000 Trade Show and Conference

Kootenay Association for Science & Technology $5,000
By-Product Synergy Conference – Fort Nelson

Total (4 projects) ***$13,038***

WOOD PRODUCTS INTERNSHIP PROGRAM (WPI)

Mr. A. Crane $18,000
Skeena Cellulose Inc.
Prince Rupert

Mr. P. Francis $18,000
Chateau Building Products Ltd.
North Vancouver

Total (2 projects) ***$36,000***